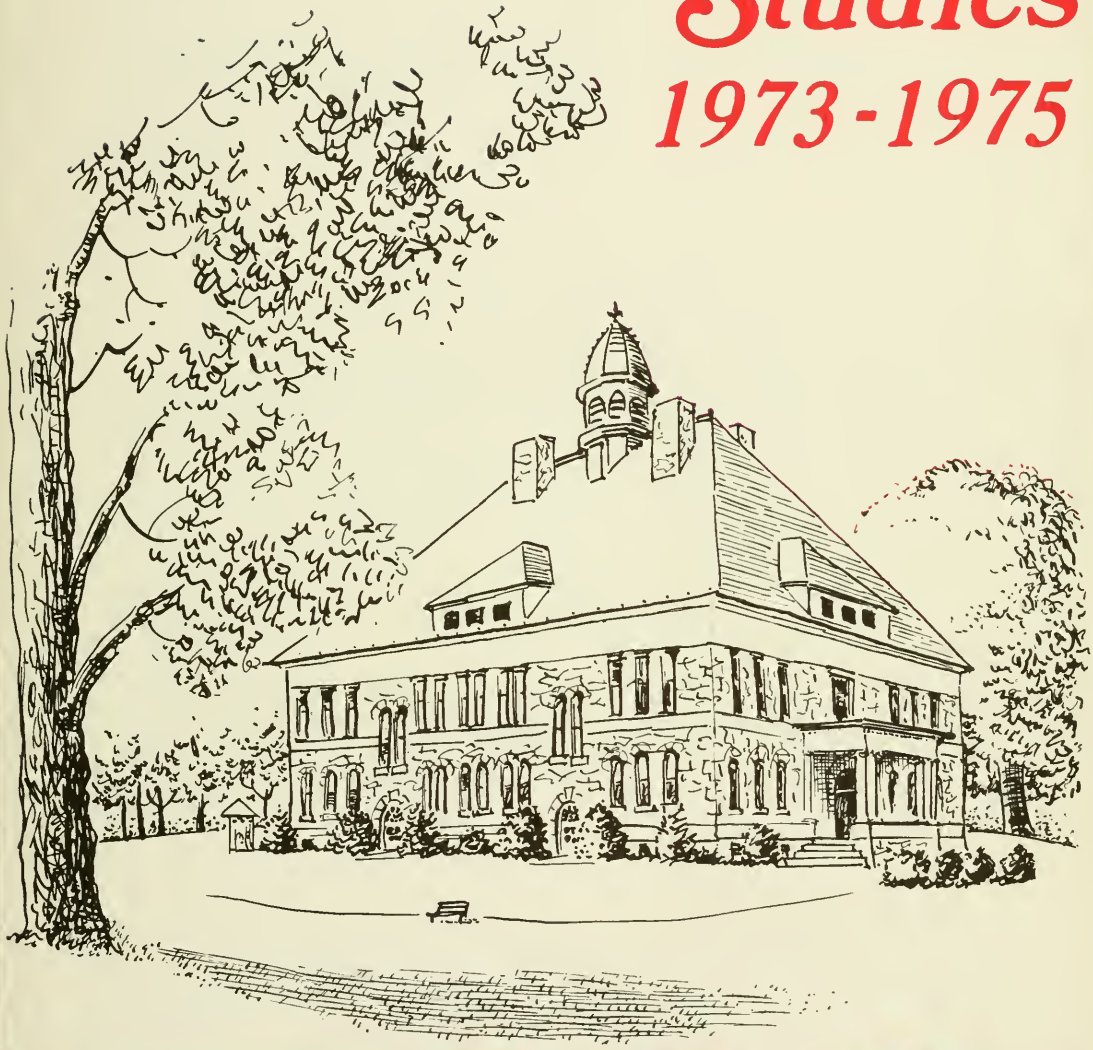
Graduate Studies 1973-1975



West Chester State College Bulletin

Graduate Academic Calendar

FALL SEMESTER 1973

Classes begin	September 5 (Wednesday)
Thanksgiving Recess begins	November 21 (Wednesday) as classes end
Thanksgiving Recess ends	November 26 (Monday)
Fall Semester ends	December 20 (Thursday) as classes end

SPRING SEMESTER 1974

Classes begin	January 14 (Monday)
Spring Recess begins	April 6 (Saturday) as classes end
Spring Recess ends	April 15 (Monday)
Alumni Day	May 18 (Saturday)
Commencement	May 19 (Sunday)

SUMMER SESSIONS 1974

Pre Session	Monday, June 3, thru Thursday, June 20
Regular Session	Tuesday, June 25, thru Friday, August 2
Post Session	Tuesday, August 6, thru Friday, August 23

The College reserves the right to change the Graduate Academic Calendar if deemed necessary.

The academic calendar for 1974-1975 will be posted on the Graduate Office bulletin board in Spring 1974.

WEST CHESTER STATE COLLEGE BULLETIN

1973/1975 GRADUATE STUDIES

VOLUME 101 NUMBER 3 MAY 1973
WEST CHESTER, PENNSYLVANIA 19380

West Chester State College is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The American Association for Health, Physical Education, and Recreation, The National Association of Schools of Music, The Council on Social Work Education, and The American Chemical Society.

Willard J. Trezise, *Dean of Graduate Studies*

W. Clyde Skillen, *Assistant to the Dean of Graduate Studies*

OFFICE OF GRADUATE STUDIES

Room 205—Administration Building

Telephones:

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Judy L. Fidler, Secretary to the Dean of Graduate Studies
Antoinette M. Franciotti, Secretary to the Dean of Graduate Studies
Patricia H. McCombs, Secretary to the Dean of Graduate Studies

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WEST CHESTER STATE COLLEGE BULLETIN

Issued four times a year, January, April, May, and August, by the Trustees of West Chester State College at West Chester, Pennsylvania. Entered as second class matter March 3, 1931, at the Post Office at West Chester, Pennsylvania, under the Act of Congress of August 24, 1912. Second Class Postage paid at West Chester, Pa. 19380.

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Coordinator of IGA Social Affairs	JOSEPH DRABYAK
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*On detached service from the Pennsylvania Department of Education.

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(1972–1973)

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School of Education	RONALD L. GOTTSHALL
School of Health and Physical Education	RALPH H. KAPILIAN
School of Music	LOIS W. ALT
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School of Health and Physical Education	RONALD ROHNER
School of Music	JERE FRIDY
School of Sciences and Mathematics	RUTH BOWERSOCK
School of Social and Behavioral Sciences	JOSEPH NEARY
Director of Library Services	FRANK Q. HELMS
Instructional Services Representative	MARTIN J. HIGGINS

GRADUATE PROGRAMS AT WEST CHESTER

Certification and/or Master of Education			Master of Arts		Master of Science
Biology	Geography	Mathematics	Biology	German	Chemistry
Chemistry	German	Music Education	English	Latin	Educational Research
Counselor Education*	Health and Physical Education	Physical Science	Geography	Spanish	Health and Physical Education
Earth and Space Science	Instructional Media Education	Reading	History	Teaching English as a Second Language	
Elementary Education	Latin	Social Science	Mathematics		**Master of Music**
English		Spanish	Music		
French			Philosophy		
			Psychology		
			French		

* At West Chester State College, the master's degree is required for those seeking certification in Counselor Education.

The provisions of this Bulletin are not to be regarded as an irrevocable contract between the student and the College. West Chester State College reserves the right to change any provisions or requirements at any time within the student's term of attendance.

Cover design and drawing by Peter Walsh.

A Look at West Chester

WEST CHESTER STATE COLLEGE is one of the largest and oldest of the 14 institutions of higher learning owned and maintained by the Commonwealth of Pennsylvania. It is a comprehensive college whose primary purposes are to prepare teachers for Pennsylvania's public schools and to provide a liberal arts education for the youth and other citizens of the Commonwealth. The enrollment includes nearly 6,000 full-time undergraduates, about 900 part-time undergraduates, and about 1,700 graduate students, most of whom attend on a part-time basis.

The College had its origins in the West Chester Academy, founded in 1812. In 1871 the Academy became West Chester State Normal School. With the introduction of a four-year program in 1927, the School was named West Chester State Teachers College. When the liberal arts program was added in 1962, the College acquired its present name.

The Bachelor of Arts, Bachelor of Science, Bachelor of Music, Master of Arts, Master of Science, Master of Education, and Master of Music degrees are offered.

As a result of the $44,000,000 building program of the 60's, West Chester has excellent facilities for modern education. Major new buildings on North Campus (an enlargement of the original campus), include the Learning Research Center, housing a laboratory school and computer center; the Francis Harvey Green Library; Mitchell Hall (Fine Arts); the two phases of Schmucker Science Center; and six high-rise residence halls. The new South Campus, a 281-acre expanse, contains the Health and Physical Education Center, which has been nationally acclaimed for its teaching, performance, and research facilities; John A. Farrell Stadium; and an athletic field complex.

Under construction are New Main, a classroom building for the Humanities, and the Earl F. Sykes Student Union building. Phase II of the library is in the planning stage.

BACCALAUREATE DEGREES OFFERED

The Bachelor of Science in Education degree is given in four basic curricula—elementary, secondary, music education, and health and physical education—and in one area (speech pathology and audiology) of special education. Certification programs are available in driver education and safe living, environmental (outdoor) education, and in the special education fields which train for the teaching of mentally retarded and physically handicapped children.

The liberal arts program leads to the Bachelor of Arts degree in arts and letters, social and behavioral sciences, sciences, mathematics, and music; to the Bachelor of Music; and to the Bachelor of Science in Chemistry. The Bachelor of Science degree is also offered in business administration and in nursing.

An Undergraduate Studies catalogue may be obtained by writing to the Director of Admissions.

LOCATION OF THE COLLEGE

The Borough of West Chester, which has been the county seat of Chester County since 1786, is a pleasant and substantial community with a population of about 20,000. The town was settled in the early 18th century, principally by members of the Society of Friends; charming traces of their culture remain in the community. West Chester is part of the rapidly growing suburban complex surrounding Philadelphia and offers interesting opportunities for the study of local, county, and regional government in a period of change and growth.

Philadelphia is 25 miles to the east and Wilmington 15 miles to the south, putting the libraries, museums, and other cultural and historical resources of both cities in easy reach. Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historical attractions are near West Chester.

HOW TO REACH THE COLLEGE

ROUTE 3 (West Chester Pike) from Philadelphia.
ROUTE 100 SOUTH from Downingtown Interchange of Pennsylvania Turnpike.
ROUTE 202 SOUTH from Valley Forge Interchange of Pennsylvania Turnpike.
SEPTA BUSES from 69th Street Terminal in Philadelphia.
PENN CENTRAL RAILROAD from Philadelphia to West Chester (limited schedule).

PROGRAM FOR IN-SERVICE TEACHERS

West Chester maintains an extensive two-track program for teachers in service. One phase is composed of late-afternoon, evening, and Saturday morning courses for those desiring to satisfy various professional needs, including certification requirements. The second is the graduate program.

The Graduate Program at West Chester

West Chester's program of graduate studies, introduced in 1959, has grown rapidly in the past 14 years. The College now offers the Master of Education degree in 18 disciplines; the Master of Arts in biology, English, geography, history, mathematics, music, French, German, Latin, Spanish, philosophy, psychology, and Teaching English as a Second Language; the Master of Science in chemistry, educational research, and health and physical education; and the Master of Music.

Certification programs, as well as course work meeting various professional and academic needs, are also available.

With the in-service teacher particularly in mind, West Chester has designed its graduate studies for the fall and spring semesters around a schedule of late afternoon, evening, and Saturday morning classes. It is possible to undertake full-time graduate programs during the academic year and the summer sessions.

OBJECTIVES

West Chester is committed to increasing the competence of the graduate student in his academic discipline and to deepening the professional skills of those in the field of education.

ADMINISTRATION

The graduate program is under the direction of the administrative officers of the College, the Graduate Council, and the administrative officers of Graduate Studies.

The Graduate Council establishes all major policies for the administration of the program, reviews all requests for special consideration, considers recommendations from the departments of the Schools, and acts as the executive council for the College administration on all matters related to the graduate program.

The administrative officers of the graduate program are the Dean of Graduate Studies, Assistant to the Dean of Graduate Studies, the Associate Deans for Graduate Studies, and the Graduate Council.

SUMMER SESSIONS

The 12-week summer sessions are divided into three periods: the Pre Session of three weeks, the Regular Session of six weeks, and the Post Session of three weeks. All Pre Session classes meet in the evenings; classes for the other two sessions meet mainly in the day, with some exceptions.

Applications (see Admissions) should reach the Graduate Office as early as possible during the academic year preceding summer sessions. The Summer Sessions Graduate Catalogue, available in April, should be consulted. Students with further questions are invited to call or visit the Graduate Office.

FALL AND SPRING OFFERINGS

Graduate Catalogues which announce offerings and registration procedures for the fall semester may be obtained during the summer and for the spring semester, during the fall.

Admissions

Admissions to West Chester State College are based on the academic qualifications of applicants and are made without regard to race, sex, creed, or national origin.

Students are admitted for graduate study upon giving evidence of graduation from a four-year college or university approved by the national, regional, and professional accrediting agencies shown on Page II, and upon demonstrating a potential for success at the graduate level.

Because West Chester is committed to serving the youth of the Commonwealth, most of the students admitted for graduate study are residents of Pennsylvania. Out-of-state students are accepted on a highly selective basis, and only if space is available. In addition to meeting the College's requirements, they must demonstrate high potential and abilities.

The Dean of Graduate Studies may admit students for varying purposes, among them:

1. To obtain the master's degree.
2. To meet certification requirements.
3. To establish credit for other reasons.
4. To gain personal growth as an auditor, receiving no credit.

Before graduate work of any kind may be undertaken, the student must gain admission to the graduate program, either as a *non-degree* student or as a *degree student*.

ADMISSION REQUIREMENTS FOR NON-DEGREE STUDENTS

Students who do not qualify academically for the master's degree program, as well as students who do not intend or have not yet decided to seek the master's degree but require credit for certification or for some other valid reason, may be admitted as non-degree students, provided the department can accommodate them.

1. The applicant must possess a baccalaureate degree. If not from a college or university accredited in the United States, the degree must be equivalent to the baccalaureate degree conferred by the colleges and universities of this country.
2. He must present a cumulative academic average of 2.0 (with A equaling 4).
3. If, during the evaluation of an application, questions of a special nature arise, the applicant may be required to have a personal interview with a designated official of a School.

Note well: Admission to graduate study does not constitute admission to a degree program, and there is no guarantee that courses taken as a non-degree student may later be used to satisfy degree requirements.

AUDITORS. An auditor is merely a listener who does not necessarily do the work of the course. He obtains no credit. He makes the usual formal application and is enrolled as an *auditor.* Although he does not need to submit transcripts, he must obtain approval to audit from the department chairman or coordinator and the professor for his course, and he pays the regular basic fee.

Courses taken for audit may not be used later for credit.

ADMISSION REQUIREMENTS FOR DEGREE STUDENTS

Applicants for a program leading to the master's degree are considered on the basis of their academic record, interviews which evaluate their prospect for successful work at the graduate level, and various other criteria, which may include examinations or letters of recommendation.

The following admission requirements must be met:

1. The applicant must possess a baccalaureate degree. If not from a college or university accredited in the United States, the degree must be equivalent to the baccalaureate degree conferred by the colleges and universities of this country.
2. He must present an undergraduate record showing a cumulative average of at least 2.50 and a grade of at least 2.75 in his concentration. (There is one exception: the admission requirement for the Master of Science in educational research is a cumulative average of at least 2.75 and a grade of at least 3.00 in the concentration.)

3. If the department whose degree program he wishes to undertake requires the Graduate Record Examination or the Miller Analogies Test for admission, he must take this examination.
4. His admission must be approved by the School giving his desired degree program. Before such approval is given, the applicant must be interviewed by an official designated by the School. *The applicant must arrange for this interview.*
5. He must fulfill any admission requirements which are particular to his intended program. To determine these, refer to the specific program.
6. His admission must be approved by the Dean of Graduate Studies.
7. All admissions are contingent upon the availability of space in the department.

An applicant who meets the grade requirements, but has academic deficiencies in his preparation, may be able to gain *provisional admission*, provided he demonstrates high academic promise. In order to remove deficiencies, he must take course work which will not be credited to his degree requirements. The conditions for removal of the provisional status will be specified by the chairman or coordinator.

Students admitted to a degree program must clearly understand that admission to degree study does not constitute admission to *degree candidacy*. The degree student first enters upon a pre-candidacy period of not more than 15 semester hours. During this period he must attain specified minimum grade averages and satisfactorily complete certain requirements specified under "Degree Candidacy" in Academic Information.

ADMISSION OF FOREIGN STUDENTS

Students from foreign countries may be admitted to the graduate program provided they meet the requirements outlined above and the additional requirements outlined below and follow the procedures outlined below. As with all out-of-state students, foreign students are accepted on a highly selective basis and only if space is available.

In order to allow sufficient time for admitted foreign students to make their departure arrangements, the College requires that all applications and all supporting documents be on file in the Graduate Office no less than four months prior to proposed entry dates.

The information and documents which must be presented are:

1. A completed application form, together with the non-refundable application fee of $10, payable to the Commonwealth of Pennsylvania.
2. An official record of his intermediate school certificate, showing the date issued.

3. An official listing of all courses taken after receiving the intermediate school certificate. This listing must show the credits, class hours, and laboratory hours for each course as well as the year in which each course was taken.

4. Evidence of satisfactory performance on the Test of English as a Foreign Language (unless English is the applicant's native language).

   Information about the TOEFL test, including test dates and locations in foreign countries, should be obtained from the Educational Testing Service, Box 899, Princeton, N.J. (Registration forms for TOEFL tests must reach Princeton at least five weeks before the test is to be taken.)

5. Written evidence, furnished by a responsible reference, that the student has adequate financial resources to undertake and continue a program of study.

When the College has received and reviewed all supporting documents, the Graduate Office will notify the applicant of its action upon his application. Until he has received notice of acceptance, the foreign student ought to remain in his own country; the College can assume no responsibility for his housing or his welfare. Once a foreign student has been admitted, College authorities will make every reasonable effort to find housing for him, but—except during Summer Sessions—West Chester does not provide dormitory accommodations for graduate students and cannot guarantee a place of residence.

CREDIT BY TRANSFER

Applicants to a degree program at West Chester who have earned credits through previous graduate study at another college or university may transfer in credit under the following provisions:

1. The credits must have been earned in residence at an approved graduate school.

2. The courses taken must be essentially the same as courses offered at West Chester and must be approved by the department or School in which the applicant intends to enroll at West Chester.

3. No more than six credits may be transferred. No exceptions.

4. The grade earned for courses to be transferred must be B or higher. (A=4.)

5. Two official transcripts must be submitted. These must be sent by the institution which granted the credits directly to the Office of Graduate Studies, and they must clearly indicate that the courses to be transferred are graduate courses which were given graduate credit.

   If these official transcripts were submitted when the student made application to a degree program at West Chester they will be on file and need not be re-submitted.

6. Credits received on continuing-education or undergraduate transcripts do not qualify for graduate transfer credit.

7. The courses for transfer must have been taken recently enough to fall within the six-year time limitation.

ADMISSION OF STUDENTS WITH A MASTER'S DEGREE

Students with a master's degree from an approved institution are admitted to West Chester for further work simply through a letter supplied by the conferring institution, confirming the award. They must file an application and pay the application fee.

COURTESY TO TRANSFERS FROM OTHER PENNSYLVANIA STATE COLLEGES

As a courtesy, West Chester does not require the application fee from degree students from other Pennsylvania State Colleges or Indiana University of Pennsylvania who apply to take work for transfer.

The Application Procedure

1. An application form must be secured by writing to or calling at the Graduate Office.
2. The completed form must be returned to the Graduate Office.
3. A non-refundable application fee of $10, payable to the Commonwealth of Pennsylvania, must be sent to the Office of Business Affairs.
4. The applicant must request all institutions at which he has taken undergraduate work (even briefly) to submit two official transcripts directly to the Graduate Office. The transcripts from the institution which granted the baccalaureate degree must show the complete undergraduate cumulative index. Transcripts mailed or delivered by applicants are not acceptable.
5. If the applicant has done prior graduate study at another college or university, he must ask that institution to send two official transcripts directly to the Graduate Office. (See also "Credit by Transfer" above.)
6. A photograph (2″ x 2″) is required prior to registration.
7. If the applicant has special problems or questions, he is advised to request an interview with the Dean of Graduate Studies.

APPLICATION DEADLINE. The application procedure should be initiated at least two months before registration.

NOTIFICATION OF ADMISSION

As soon as decision upon an application is reached, the applicant will receive the decision by letter.

REGISTRATION

Accepted students will receive registration instructions through mailings made prior to each semester and the summer sessions.

Fees and Expenses

(Fees are subject to change without notice.)

(Unless otherwise specified, all fees must be paid by check or money order payable to: Commonwealth of Pennsylvania.)

BASIC FEE

Legal residents of Pennsylvania–$42 per semester hour of credit.
Out-of-state students–$46 per semester hour of credit.

APPLICATION FEE

A fee of $10, refundable under no circumstance, is required.

LATE REGISTRATION FEE

All fees are due and payable on the date of registration, after which a late fee is charged.

HOUSING FEE (SUMMER SESSIONS ONLY)

The housing fee for resident students is $126 for the Regular Session and $63 for the Pre or Post Session. The fee covers accommodations in a double room in one of the College residence halls and meals in the dining hall in Lawrence Center. A private room is $2 additional per week. (Housing for graduate students is not available during fall and spring semesters.)

COST FOR BINDING THE THESIS OR RESEARCH REPORT

THESIS. Students are required to pay the imprinting and binding costs for three copies of their Thesis at $3.50 each.

RESEARCH REPORT. Students are required to pay the imprinting and binding costs for three copies of their Research Reports, at $3.50 each.

Instructions for the payment of these costs may be obtained in the Graduate Office.

TRANSCRIPT FEE

The transcript fee is $1 per transcript. West Chester students receive their first set of transcripts at no charge but pay the fee thereafter.

AUDITOR FEE

An auditor (a student who attends a course without credit) pays the same fees as other students.

MUSIC FEES

In addition to the basic fee, graduate students in music are subject to the following schedule of fees:

Instruction

Piano, Organ, Instrument, or Voice—one half-hour lesson each week	$55 per semester
Instrument Class or Ensemble—2 hours per week	$35 per semester

Rentals

Any Band or Orchestra Instrument	$6 per semester $1 per week in summer sessions

Organ Rental is $12 per semester or $2 per week in summer sessions.

GRADUATION FEE

A graduation fee of $20 is required of all degree candidates prior to graduation. No degree will be granted until this fee is paid. For May graduation, the deadline for payment is the first Monday in February; for August graduation, the first Friday in June. Checks should be drawn to "Graduate Commencement Fund" and delivered to the Graduate Office.

STUDENT ACTIVITIES FEE

Full-time graduate students (those carrying at least 12 credits) pay the Intracollegiate Governmental Association (IGA) student activities fee of $25 per semester. Bills for this fee are mailed by IGA to students and are due upon receipt. The fee admits students to all social and athletic events on student status and helps defray the cost of many cultural and social events. If part-time students wish the benefits of the activities program, they may pay the fee at their initiative.

Both part-time and full-time students are required to pay the activities fee for all summer sessions. It covers—among other things—the cost of summer tours and is as follows:

$3.50 for the Regular Session
$1.75 for the Pre or Post Session

Make checks payable to: Intracollegiate Governmental Association.

CAR PERMIT

(Cash or check drawn to Intracollegiate Governmental Association)

Students who drive on campus are required to have a permit, available at a minimal charge at registration and in effect for 12 months. The permit for summer only is half the price of the annual registration.

LIBRARY CARD/I.D. CARD

In order to borrow books from the library, students must present identification. For graduate students, this may be either a Library Card or an I.D. (Identification) Card. It is a simpler procedure to obtain the Library Card, which does not require a photograph, but the I.D. card serves broader purposes and full-time students generally find it useful to have one. The fee for either card is $1. The I.D. card is issued at the IGA Office, the Library Card at the library.

REFUNDS—FALL AND SPRING SEMESTERS

No portion of the basic fee shall be refunded if the student has attended one-third or more than one-third of the class periods scheduled during a given semester.

If a student withdraws from a course, for approved reasons, before one-third of the scheduled class periods have been completed, he shall then be entitled to a refund of one-half of the fees paid.

If a student registers for a course and then withdraws before the second scheduled class meeting, he will receive a refund of all but $10.

Requests for refunds must be made in writing to the Office of Business Affairs.

Refunds will not be made to students who are suspended or dismissed or who drop courses without the approval of the Dean of Graduate Studies.

REFUNDS—SUMMER SESSIONS

For the summer sessions, refunds will not be made to students who voluntarily withdraw or are indefinitely suspended or dismissed from the College; these regulations apply after the first day of class attendance.

In cases of personal illness, certified by an attending physician, or for other emergency reasons which may be approved by the Trustees, the College will refund the portion of the basic fees for the part of the session which the student does not spend in the College.

TIME LIMITATION ON REFUNDS

A student who fails to file an official withdrawal-from-class form, prior to the end of a semester or any one of the summer sessions, forfeits any refund to which he might have been entitled.

Financial Aid

LOANS

National Direct Student Loan Program

Formerly the National Defense Student Loan Program, the National Direct Student Loan Program is a cooperative effort of the federal government and West Chester State College which enables qualified students to secure long-term educational loans under attractive conditions. The law requires that each borrower be:

1. Enrolled or accepted in the institution participating in the Program.
2. Carrying at least 1/2 the normal full-time workload as determined by the institution.
3. In need of the amount of the loan to pursue his/her course of study.
4. Capable, in the institution's opinion, of maintaining good standing in his/her curriculum.

Under the law, a graduate student may borrow up to $2,500 per year, with the combined total of undergraduate/graduate loans not to exceed $10,000. Approval of loans depends upon the student's financial need and the availability of loan funds. For further information contact the Director of Financial Aid.

Pennsylvania Higher Education Assistance Agency Loan Guaranty Program

The Student Loan Guaranty Program is a cooperative effort of private lending institutions and the state and federal governments which enables qualified students to secure long-term educational loans under attractive conditions. To be eligible for a loan, a student must:

1. Be a domiciliary of Pennsylvania for 30 days immediately prior to the date of filing a loan guaranty application.
2. Be accepted for enrollment in an approved institution or, if enrolled, be in good standing.
3. Meet satisfactory character requirements and citizenship requirements.
4. Be classified as at least a half-time student.

The maximum loan per academic grade level for full-time graduate students is $2,500; for half-time graduate students, $1,250. The total indebtedness permissible for all years of undergraduate and graduate study is $10,000. For further information contact the Director of Financial Aid.

GRADUATE ASSISTANTSHIPS

A number of graduate assistantships are available to qualified graduate students. Interested students are advised to consult their School Deans or the Dean of Graduate Studies to determine the availability of assistantships and the candidate's eligibility for assignments, which may involve part-time undergraduate teaching, assistance in research, or other professional duties.

Beginning graduate assistants are paid at the rate of $2,705 for the academic year, and course fees are waived.

RESIDENT ADVISERS

Opportunities to serve as resident advisers for undergraduate students are open to men and women graduate students. Advisers live in the College residence halls and counsel undergraduates in their personal, social, and educational development. Along with a stipend, room and board are provided. Application for adviserships is made to the office of the Associate Deans of Students.

College Services and Student Living

FRANCIS HARVEY GREEN LIBRARY

The Francis Harvey Green Library offers the graduate student excellent facilities for study. The library is presently housed in an attractive, modern building, completed in 1966 and containing many special features, including more than 300 individual study carrels, equipment and facilities for reading micromedia, a curriculum laboratory, a special-collections room, and a student-faculty lounge. With a collection of more than 280,000 volumes and subscriptions to more than 2,600 periodicals, the library is rapidly growing and is an increasingly important resource for both teaching and research. A new multi-story addition to the existing building should be ready for occupancy by 1976. The expanded facility will let the Library house 1/2 million books and will have many features, among them faculty, graduate, and undergraduate studies and lounges; a uniquely designed special-collections room; an enlarged curriculum laboratory with audio-visual facilities and dial access capability; and expanded periodical facilities.

The general collection is augmented by an extensive micromedia collection representing more than 300,000 volumes. The micromedia material includes books, periodicals, newspapers, and doctoral dissertations. Adequate facilities for reading this material are available. The special-collections room houses the Chester County Collection of Scientific and Historical Books; the Normal Collection (a collection of historical books on physical education and publications by and about the faculty and alumni); the Biographies of the Signers of the Declaration of Independence, by John Sanderson; and the Shakespeare Folios. Other collections of note are the children's, curriculum, government documents, and music collections; and the Philips collection of autographed books.

The many services of the library are available to all graduate students. The college library, through the assistance of a staff of 17 professional librarians with a variety of subject and language backgrounds, provides the informational and bibliographical services required by students and faculty working in all areas covered by the College's instructional programs. To further publicize its services and to add to the cultural enrichment of the students, informative and aesthetic exhibits are displayed in the library throughout the year.

BUREAU OF RESEARCH AND RELATED SERVICES

The Bureau of Research and Related Services fosters the development of basic, applied, and institutional research and provides facilities for the tabulation and analysis of research data. The research function of the Bureau encompasses studies initiated by the faculty and administrative staff as well as cooperative endeavors carried on under the joint sponsorship of the College and various educational agencies and foundations. The Bureau assists faculty and students to secure financial support for their research projects. A computer center, statistical laboratory, and research facilities are maintained in the Learning Research Center.

Data processing services include the tabulation and summarization of information essential to the operation of the various administrative divisions of the College and the statistical treatment and computer analysis of experimental data obtained from faculty and student research activities.

CHESTER COUNTY INSTRUCTIONAL MATERIALS SERVICE

Graduate students may make use of the facilities of this center, which serves the public schools of Chester County and has headquarters at the College. The center makes more than 3,200 films available to the 113 schools it serves. It also maintains the College film library and promotes effective use of instructional materials and technology in the 12 affiliated school districts.

HOUSING

West Chester is able to provide housing facilities for its graduate students only during the Summer Sessions, when accommodations in College residence halls, with board included, are available for single men or women, through the offices of the Associate Deans of Students. If residing in College residence halls during the summer, graduate students are expected to abide by the housing regulations governing undergraduate students.

The College has no facilities for married students. Area newspapers and realtors should be consulted.

COLLEGE POLICY FOR STORM CLOSINGS

If storm conditions make it necessary to close the College, announcement will be made over most area radio and television stations, which employ a system of code numbers to make known school closings. West Chester's numbers are:

853	Day Classes for Undergraduate Students
2853	Graduate Classes and Other Evening Classes

STUDENT HEALTH SERVICE

To meet emergency and first-aid needs, and to perform routine infirmary treatment of minor illnesses and minor surgical conditions, two part-time physicians and five registered nurses are available, at no cost to students. Beyond these services, the College does not furnish medical care nor bear the costs of medical or surgical treatment or hospitalization. The community of West Chester has qualified physicians and excellent hospital facilities. The Service is in Reynolds Hall where, for emergencies, a nurse is on duty on a 24-hour basis.

Full-time (but not part-time) graduate students may take advantage of a group medical and accident policy, approved by the College and covering accidents and illness on a twelve-month basis. The policy may be obtained at a minimal annual premium from the Health Service.

THE COUNSELING CENTER

The professional counseling and psychological services of the Counseling Center are available to students needing assistance regarding educational, vocational, personal, social, and emotional concerns. The counseling psychologists who staff the Center are experienced in counseling, personality evaluation, and administration of psychological tests. Assistance is provided through both individual and group approaches, depending upon student need. All conversations and test results are confidential.

The services of the Counseling Center are available at no charge to all West Chester State College students, freshman through graduate students. To arrange an appointment, students may come to 112 Ramsey Hall or may call 2611 or 2741. Every attempt will be made to see the student within the same day, though this may vary with the demand for services.

SPEECH AND HEARING CLINIC

Graduate students who need help in meeting minimal speech standards may use the services of the Speech and Hearing Clinic at no cost. The Clinic is conducted by the Department of Speech Pathology and Audiology, in Wayne Hall.

CAREER DEVELOPMENT CENTER

The College maintains active career planning and placement services for its students and graduates. The Career Development Center, assisted by the Schools and Administration of the College, helps graduates and graduate students plan their careers and obtain desirable positions related to their interests and education.

Counseling is offered to all students and graduates in career planning, opportunities, and employment trends. The Office also renders assistance to school and college officials seeking qualified teachers and administrators. Primarily for the benefit of arts and sciences graduates, communication is maintained with government agencies, business, and industry. The Career Development Center libraries provide information about career opportunities, public and private schools, business and industrial careers, Civil Service careers, application forms and procedures, and job requirements.

The services are available to graduate students at no cost, subject to the following College policy:

1. Students who have satisfactorily completed more than 15 semester hours of graduate study at West Chester or who hold undergraduate degrees from the College are eligible for the full services of the Office. Full services include: registration, development and mailing of credentials to prospective employers, career counseling, provision of private facilities for on-campus interviews arranged by the applicant, and participation in a program of on-campus interviews arranged by the Career Development Center.
2. Graduate students whose baccalaureate degree was not received at West Chester and who have satisfactorily completed less than 15 semester hours are eligible for limited service, comprising use of the Career Development Center libraries and guidance from the staff.

GRADUATE ASSOCIATION

The West Chester State College Graduate Association, formed in 1968, concerns itself with the welfare of graduate students and provides avenues for communication among students, faculty, and Administration. All graduate students are members of the Association, whose officers represent the student body in various capacities and work in the interests of West Chester graduate students. An Association publication gives voice to various student concerns, disseminates timely information, and encourages participation in campus activities ranging from recreational opportunities to cultural events.

The Association sends representatives to Graduate Council meetings, considers curriculum needs, and provides orientation for new graduate students. Association headquarters are on the second floor of the Administration Building and may be visited by graduate students during regular College hours.

The expenses of the Association are met through the Intracollegiate Governmental Association, the all-campus organization of students.

VETERANS' AFFAIRS

Veterans' affairs are dealt with in the offices of the Director of Scheduling and Academic Records, Administration Building. All veterans intending to receive benefits must have their enrollment verified in the Scheduling and Academic Records offices during the first week of each semester and each summer session.

P.A.V.E. AND VETERANS CLUB

The P.A.V.E. (Pennsylvania Program to Advance Veterans' Education) Office is located in the Administration Building, Room G5. Two student veteran counselors are available to assist in any problems encountered by veterans and to help veterans take full advantage of their benefits.

The Veterans Club is also located in Room G5 and is an active on-campus organization striving for increasing recognition of veterans and for more veteran-oriented programs at the College.

HONOR SOCIETIES

ALPHA PSI OMEGA. Rho Mu, the West Chester chapter of this coeducational national dramatic fraternity, is open to both undergraduate and graduate students. Organized in 1961, it is responsible for one major production each year, presented in cooperation with the Little Theatre. Membership is by invitation.

GAMMA THETA UPSILON. Gamma Eta chapter of this professional geography fraternity was established in 1963. The organization promotes professional interest in geography.

PI GAMMA MU. The School of Social and Behavioral Sciences sponsors Omega chapter for the purposes of improving scholarship in the social sciences and inspiring social service to mankind. Majors in the School with high academic accomplishments are invited into membership.

SIGMA ALPHA IOTA. This international professional fraternity for women is dedicated to service in the field of music. Epsilon Epsilon chapter, formed in 1968, is open to both undergraduate and full-time graduate women. Membership is by invitation and recognizes scholarship. Candidates must perform successfully in an audition recital.

PHI ALPHA THETA. The Nu Sigma chapter of this international honor society in history is open to undergraduate and graduate students. Membership is by invitation and recognizes scholarship. The chapter is sponsored by the Department of History and was formed in 1968.

PHI DELTA KAPPA. Organized in 1965, the West Chester chapter of this international graduate honor society for men is sponsored by the School of Education. Membership, by invitation, recognizes scholarship in all fields of education.

PHI EPSILON KAPPA. Open to both undergraduate and graduate men students, the local chapter of this national professional fraternity seeks to advance the profession of health and physical education. The chapter is sponsored by the School of Health and Physical Education.

PHI MU ALPHA (SINFONIA FRATERNITY). Rho Sigma, formed in 1967, is the West Chester chapter of this national professional fraternity for men in music and is open to undergraduate and graduate students. Phi Mu Alpha advances the cause of music in America, and membership, by invitation, recognizes scholarship.

PSI CHI. A chapter of this national honor society in psychology is sponsored by the Department of Psychology. Membership is by invitation, with scholarship and citizenship as criteria. Psi Chi, under the aegis of the American Psychological Association, endeavors to advance the service of psychology and encourages superior scholarship in psychology.

CULTURAL EVENTS

Students are urged to take advantage of the rich cultural opportunities at West Chester. Among these are the All-Star Series, the Chamber Music Series, the William Pyle Philips Lecture Foundation Series, the Campus Cinema Club, the Intracollegiate Governmental Association evening series of programs, Theatre 208, and recitals and concerts given by faculty and students of the School of Music. For a calendar of scheduled events, inquire at the Office of Cultural Affairs, Administration Building.

SPORTS ACTIVITIES

Opportunities for tennis, swimming, and other sports are available through the facilities of the School of Health and Physical Education. For details, see the Coordinator of Recreation, Health and Physical Education Center.

Academic Information and Regulations

Degree Candidacy

Summary of Degree Requirements

CLASS ATTENDANCE

Regular attendance at classes is considered essential to responsible graduate study. Absence from class does not exempt the student from course responsibilities. If, for valid reasons, an examination is missed, the student must see his professor at the earliest possible time to arrange for a make-up examination.

ATTENDANCE IN INCLEMENT WEATHER

The College convenes classes regardless of weather conditions, but students are not asked to take risks by driving on hazardous roads. If absent because of dangerous driving conditions, students must assume responsibility for work missed.

For system of announcing College closings, see College Services and Student Living.

CLASS HOURS

Classes meet during late afternoons, evenings, and on Saturday mornings in the fall and spring semesters. The Summer Sessions are composed of *Pre Session,*

which meets in evening hours for three weeks in June; *Regular Session*, which meets in morning hours for six midsummer weeks; and *Post Session*, which is held for three weeks in August, with morning hours.

STUDENT RESPONSIBILITY

It is the responsibility of the student to know and observe all regulations and procedures for the program he is pursuing, and to read this catalogue thoroughly. In no case will a regulation be waived or an exception granted because a student pleads ignorance of the regulation or contends that he was not informed of it by his adviser or other authority or because he failed to read it in this catalogue. A student planning to graduate should give careful attention to the dates relating to application for graduation and other pertinent deadlines. (See schedule of deadlines at end of this chapter.)

STUDENT LOAD

The normal work load for the summer sessions is one semester hour of work for each week of enrollment. It is not possible to carry more than one course during the Pre or Post Session. Provided permission is secured in advance from the Dean of Graduate Studies, students may carry more than six semester hours of work in the Regular Session.

The normal work load for a full-time student during the fall and spring semesters is twelve semester hours. With approval from the chairman or coordinator, the load may be increased.

Fully employed teachers may not register for more than six semester hours during a semester unless given permission by the Dean of Graduate Studies.

CLASSIFICATION OF STUDENTS

Depending upon the circumstances of his admission, a student will be classified in one of these categories:

A. DEGREE STUDENTS

1. Full graduate standing–granted to a student who meets all admissions requirements.
2. Provisional graduate standing–may be granted to a student who:
   a. Has not taken the Graduate Record Examination or a specialized entrance examination as required by the department concerned.
   b. Is unable to present all prerequisites required by the department of specialization.
   c. Has certain other academic deficiencies.
   d. Fails to meet the academic average required for a degree student.

B. NON-DEGREE STUDENTS

1. Certification–applies to students taking course work to gain teacher certification (for Level II only).
2. Unclassified–students who take graduate course work for credit but seek neither a degree nor certification.
   a. Transfer-of-credit–applies to students taking course work for transfer to another college or university.
   b. Professional growth.
3. Auditor–applies to students who receive no credit. (See "Auditors" in Admissions.)
4. Lack of openings–applies to students who qualify for a degree program but cannot be admitted due to lack of openings in the desired department.

CHANGE OF STATUS

A provisional degree student may petition for full graduate standing by making a written request to the Graduate Office, which will initiate the change-of-status procedure with the department chairman or coordinator.

Credit earned as a provisional degree student or as a non-degree student (except auditor) may be accepted in a degree program only upon the recommendation of the department concerned and provided the credits are appropriate to the requirements of the particular program and are completed within the time limit of six years.

Provisional degree students are advised to consult with their chairman or coordinator in advance, in order to select course work appropriate for transfer toward the degree.

GRADING SYSTEM

The following grading system is employed:

Grade	Interpretation	Quality Points
A	Superior	4
B	Above Average	3
C	Average	2
D	Below Average (see below)	1
F	Failure	0
I	Incomplete (see below)	
WF	Withdrew Failing	0
WP	Withdrew Passing	
Aud	Audit	
Pass	No credit given toward a degree	

D's are not acceptable as credit for degree requirements. Degree students must repeat any required course graded D. Both the D and the second grade received will be included in the cumulative average. Similarly, a degree student receiving an F in a required course must repeat the course, and both the F and the second grade will be included in the cumulative average.

REMOVING INCOMPLETES

Unless the Graduate Council grants an exception, courses given an Incomplete for valid reasons, such as unavoidable absence during final examinations, must be completed within the next 90 calendar days or the I will become an F. The 90-day requirement does not pertain to Methods and Materials of Research nor to the Thesis or Research Report.

GRADE REPORTS

Official grade reports are issued soon after the end of a semester or summer session. Students are reminded to check their reports against grade requirements and other regulations and to have their reports at hand when consulting with advisers.

CANCELLATION OF COURSES

The College reserves the right at any time to cancel an announced offering of a course if the enrollment for it is not adequate.

CHANGES IN NAME OR ADDRESS

The Graduate Office must be notified immediately of any change of address or change in name due to marriage or court order.

CHANGES IN CURRICULUM

In order to change from one program to another the student must:

1. Request the change in a letter to the Dean of Graduate Studies.
2. Request the chairman or coordinator of his present program to send a letter of release and the student's academic folder to the Graduate Office.
3. Request the chairman or coordinator of the program in which he wishes to enroll to send a letter of approval to the Graduate Office.

See also "Changing to Auditor Status," below.

REGISTRATION FOR COURSES OUTSIDE THE MAJOR FIELD

Students registering for courses outside their major field must have approval to do so from either the School Dean, the Associate Dean for Graduate Studies, or the coordinator of graduate studies in their major field. Registration cards must be approved and signed by the Deans or Associate Deans for Graduate Studies in both the major and non-major fields.

TRANSFERRING CREDIT FROM OTHER INSTITUTIONS

West Chester students planning to take work at other institutions for transfer to West Chester must first obtain approval from their chairman or coordinator in order to determine that the institution is recognized for transfer and that the course or courses will be acceptable as transfer credit for the degree. For conditions under which transfer credit may be used for degree requirements, see "Credit by Transfer" in Admissions.

POLICY ON UNDERGRADUATE-LEVEL COURSES

Within limitations, graduate students may take certain specified high-level undergraduate courses for credit toward the master's degree. The following provisions apply:

1. Written permission must be obtained from (a) the department chairman, (b) the Associate Dean for Graduate Studies or the School Dean in Schools having no Associate Dean, and (c) the Dean of Graduate Studies.
2. Graduate students may register for approved high-level undergraduate courses at the Graduate Registrations only.
3. No more than six semester hours of undergraduate course work may be applied toward the degree.
4. The undergraduate course must be taken at West Chester State College.

To determine which courses have been approved for such credit, the degree student should consult with his department chairman or his adviser.

WITHDRAWAL FROM COURSES IN FALL AND SPRING SEMESTERS

For both academic and financial reasons, a student who finds it necessary to withdraw from a course should comply with the course-withdrawal procedure, as follows:

1. Obtain a withdrawal form from the Graduate Office.
2. Have this form signed by his course professor, his department chairman or his program coordinator, and his School Dean or his Associate Dean for Graduate Studies.
3. Return the signed form to the Graduate Office before the end of the semester in which he enrolled for the course.

Students who drop a course—either before or after six class meetings—without following the course-withdrawal procedure will receive an F on their permanent record and will forfeit any right they may have had to a refund. Students who fail to follow this procedure within its time limit (the semester in which they enrolled for the course) will also receive an F on their record and forfeit any right they may have had to a refund.

If a student withdraws before the sixth meeting of a class, the withdrawal will be viewed as a cancellation of enrollment, and the course will not be entered on his academic record. He will be entitled to a refund, as explained under Fees and Expenses.

If a student attends six or more meetings of the class he will no longer be eligible for a refund, and the course will be entered on his permanent grade record, either as a WP, having no effect on his record, or as a WF, producing an F on his permanent record.

WITHDRAWAL FROM COURSES IN SUMMER SESSIONS

The policies outlined above for the fall and spring semesters do not apply for summer sessions. After one day of class attendance at any summer session, a student may not cancel his enrollment. He will receive a grade of either WP or WF for the course or courses in which he enrolled. After one day of class attendance at any summer session, a student will not be entitled to a refund. (See Fees and Expenses.)

In order to withdraw officially from a summer session, a student must submit a completed Summer Sessions Withdrawal Form to the Graduate Office. The form may be obtained in the Graduate Office.

WITHDRAWAL FROM THE COLLEGE

A student intending to withdraw completely from the graduate program must comply with the procedures outlined under "Withdrawal from Courses in Fall and Spring Semesters" (above) and, in addition, give the Dean of Graduate Studies written notice, indicating why and when he plans to withdraw. His last day in classes will be considered the date which terminates his connection with the graduate program.

When, for reasons of illness or other emergencies, a student discontinues his work at the College, he must notify the Dean of Graduate Studies at once.

(See Fees and Expenses for refund policy.)

CHANGING TO AUDITOR STATUS

Before the sixth meeting of a class, a student may change his status in the class to *auditor.* He initiates this change by calling at the Graduate Office for a change-in-class-status form.

The completed form must be submitted to the Graduate Office for approval.

TIME LIMITATION ON DEGREE PROGRAMS

All degree requirements must be satisfied within six consecutive years from the date of admission, either as a degree or non-degree student. This limitation applies also to courses taken elsewhere and accepted at West Chester as transfer credit applying to degree requirements. (See "Credit by Transfer" in Admissions.)

In unusual cases, such as military service or prolonged illness, a limited extension of time may be sought by written petition to the Graduate Council.

Students are reminded that all details concerning their Research Report or Thesis must be completed within the six-year limitation.

REAPPLICATION REQUIREMENT FOR ADMITTED STUDENTS

An admitted student who has not taken graduate courses for a period of four years or longer must reapply for admission and pay the application fee.

RESIDENCE REQUIREMENT

The minimum residence requirement for the master's degree is either a fall or spring semester on full-time status or a Regular Summer Session in which two courses are completed.

TRANSFER OF CREDIT

Not more than six semester hours of credit taken in residence at another approved institution may be transferred to be applied to degree requirements at West Chester. For conditions under which credit may be transferred, see "Credit by Transfer" in Admissions.

OBTAINING TRANSCRIPTS

Upon written request, transcripts of work taken at West Chester may be obtained from the Office of Scheduling and Academic Records. A check or money order, made payable to the Commonwealth of Pennsylvania, must accompany the request, which should indicate the period of attendance at the College, the curriculum pursued, and any change of name during enrollment. For transcript fee, see Fees and Expenses.

PERMANENT CERTIFICATION

Under Commonwealth regulations, permanent certification is available to teachers as follows:

The Instructional II (Permanent) Certificate shall be a permanent certificate issued to an applicant who shall have completed three years of satisfactory teaching on an Instructional I Certificate attested to by the superintendent of the school district in which his most recent service was performed, or in the case of an intermediate unit, the executive director, or in the case of an approved non-public school, the chief school administrator. In addition the applicant shall have completed 24 semester hours of collegiate study at an approved four-year institution and subsequent to the conferring of the baccalaureate degree.

IN-SERVICE PROGRAMS. The 24-semester-hour requirement may be satisfied, in whole or in part, through in-service programs approved by the Secretary of Education.

RENEWAL OF INSTRUCTIONAL I CERTIFICATION

Under Commonwealth regulations, the Instructional I Certificate may be renewed by completing 12 semester hours of post-baccalaureate or graduate study at a regionally approved institution. The renewed certificate extends the permitted teaching period for another three years from date of issue. The recommendation of the applicant's last district superintendent (or executive director or chief school administrator, as described in the preceding paragraph) is also required.

EDUCATIONAL SPECIALIST CERTIFICATION

Commonwealth regulations also provide for certification as an educational specialist to those persons who successfully completed an approved program of study and have the recommendation of the training institution. The Educational Specialist Certificate is issued on two levels, as follows:

Educational Specialist I (Provisional). The Educational Specialist I Certificate shall be issued for entry into a professional position in the schools of the Commonwealth. The applicant shall have completed an approved program of studies, shall possess a baccalaureate degree, and shall have been recommended for certification by the preparing institution.

Educational Specialist II (Permanent). The Educational Specialist II Certificate shall be a permanent certificate issued to an applicant who shall have completed three years of satisfactory service on an Educational Specialist I Certificate, and who shall have completed 24 semester hours of post-baccalaureate or graduate study at a regionally approved institution. In addition, the applicant shall have received the recommendation of the superintendent of the school district in which his most recent service was performed, or in the case of an intermediate unit, the executive director, or in the case of an approved non-public school, the chief school administrator.

GRADUATE RECORD EXAMINATION

Scores for the Graduate Record Examination are required for most of the degree programs, either at the time of application or at some later period. The nature of the G.R.E. requirement varies within the Schools. The prospective degree student will therefore need to consult the program outline for his intended field of study.

The Graduate Record Examination is administered by the Educational Testing Service, Box 955, Princeton, New Jersey 08540 and is composed of the Aptitude Test (morning test) and the Advanced Tests (afternoon tests in the fields of concentration). Application forms and data may be obtained either by writing directly to the Service or from the Graduate Office. The examinations may be taken at any of the testing centers designated by the Educational Testing Service. One of these is West Chester, where the Graduate Office periodically administers the Tests–generally in October, December, January, April, and June.

Application forms must be filed with the Educational Testing Service at least 15 days prior to the date of any examination.

THE AREA OF SPECIALIZATION (COMPREHENSIVE) EXAMINATION

The area of specialization examination is a comprehensive examination over the student's major field, and is constructed, administered, and evaluated by the student's major department. Degree candidates must take this comprehensive examination (oral and/or written) upon completion of 28 semester hours of credit.

OTHER EXAMINATIONS

In addition to the comprehensive examination, which is required in every program, other examinations—such as the Miller Analogies Test—may be required at the discretion of a School. Students will need to consult their program under the heading of their School, and they must also discuss all aspects of examination requirements with their chairman, coordinator, or adviser. It is incumbent upon the student to initiate such discussions.

COURSE CREDIT BY EXAMINATION

Course credit may be obtained by a graduate student by means of examination. Application must be made through the Graduate Office and consultation with the department chairman or coordinator.

RESEARCH REQUIREMENTS

The presence of a research requirement is at the discretion of the School or department. Consult specific programs to determine whether independent study, directed either toward the Thesis or a Research Report, is required, offered optionally, or omitted.

DISTINCTION BETWEEN A RESEARCH REPORT AND THE THESIS

The Graduate Council has defined the Research Report and the Thesis as follows:

A Research Report is a written record of a scientific investigation to determine the facts of a condition; hence it is essentially a report on a problem. It demands of the researcher a knowledge of the techniques of research and scientific accuracy.

A Thesis is the written account of an exhaustive research to support or refute a belief or a hypothesis. It differs from the Research Report in that it is more comprehensive and more generally demanding of a writer's knowledge, skills, and powers of scholarship.

The Graduate Council has established the following guidelines with reference to the Research Report and Thesis:

1. The student should register his decision to do a Research Report or the Thesis at the completion of the course entitled Methods and Materials of Research.
2. The department concerned must approve the subject of the Research Report or Thesis.

3. A detailed outline of the Thesis must be approved by the Dean of Graduate Studies before the student is authorized to begin his investigation. This must be on file 30 days prior to approval.

4. Upon approval by the department, the Thesis or Research Report must be typed and bound in accordance with specifications established by the Graduate Council. These specifications are on file in the offices of the department chairmen. "Form and Style in Thesis Writing," by William Giles Campbell, must be used as a format. Three copies of the Thesis or Research Report should be submitted for binding to the Graduate Office, together with three copies of the abstract (250-500 words).

   If the candidate wishes bound copies for himself, he must submit additional copies accordingly.

   For the cost of binding, see Fees and Expenses.

Degree Candidacy

Requirements for Admission to Degree Candidacy

Application for degree candidacy must be made within the first 15 semester hours of the pre-candidacy period.

During the pre-candidacy period, the student must:

1. Complete those courses which his department or program specifies as prerequisite to degree candidacy.

2. Perform satisfactorily on examinations which his department or program may require for admission to degree candidacy.

3. Achieve an overall grade average of at least 2.75 and an average of at least 3.00 in the concentration.

4. Show evidence of academic, personal, and professional qualities which satisfy the administrators of the graduate program and the chairman or coordinator of his field.

Procedure for Application to Degree Candidacy

1. The student must file an application for admission to *degree candidacy* with the Dean of Graduate Studies on an official application form available in the Graduate Office.

2. When the application has been evaluated by the department or School concerned, the Dean of Graduate Studies will inform the applicant of his acceptance or rejection.

3. Upon notice of acceptance, the degree candidate must communicate with his chairman or coordinator in order to initiate the planning of his program of study.

4. At this point, the candidate must also submit to his chairman or coordinator a *written request* for the appointment of his adviser.

   Approval for degree candidacy must be given by officials of both the academic discipline and by the Dean of Graduate Studies.

REAPPLICATION FOR DEGREE CANDIDACY

Applicants who fail to qualify as degree candidates are classified as non-degree students. In order to reapply for degree candidacy they must attain an average of 3.00 in course work *specified by their department chairman or coordinator.*

RETENTION IN A DEGREE PROGRAM

Whenever a student's grade point average falls below 3.0 in his major field and 2.75 overall after acceptance to degree candidacy, his standing will be reviewed by his departmental adviser and he will be notified as to his academic status. If, after 24 hours of work and thereafter in a degree program, his grade point average is still below a 3.0 in his major field and 2.75 overall, he will be dropped from the program and is no longer admissible to that degree program.

ADVISORY SYSTEM

Upon admission to a degree program, students will be fully counseled by their department chairmen regarding the College's advisory system. It is important for the degree student to note that the initiative for seeking advisement, throughout his program, rests with him. The student must also take the initiative in seeing that his degree requirements are fulfilled. (See also "Procedure for Application to Degree Candidacy," above.)

Summary of Requirements for the Master's Degree

The master's degree will be granted upon:

1. Admission to candidacy for the degree.
2. Submission and approval of the professional research thesis in those programs requiring it.
3. Completion of all required courses with a cumulative average of 2.75, an average of 3.00 in the area of concentration, and achievement of satisfactory scores on the Graduate Record Examination, if required. (See department requirements.)
4. Satisfactory performance on a final oral and/or written comprehensive examination conducted by the student's advisory committee in the field of specialization.

   It is the responsibility of the candidate to apply for this examination.
5. Meeting all required deadlines. (Refer to the schedule of deadline dates below.)

Additional Requirement for the M.Ed. Degree

In addition to fulfilling the five requirements stated above, candidates for the Master of Education degree must give evidence of successful teaching experience as approved by the department chairman. Other experience in lieu of this requirement must be approved by the Graduate Dean.*

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* Does not apply to the degree-certification program in Counselor Education.

DEADLINE DATES FOR STUDENTS PLANNING TO GRADUATE AT END OF SPRING SEMESTERS OR IN AUGUST

February (first Monday)	Last day to file letter of intent to graduate in May. Due date for the graduation fee to be paid by check or money order to "Graduate Commencement Fund." (This is sent to the Graduate Office.)
April (third Monday)	Last day to take comprehensive examinations.
April (last Friday)	Last day to submit grades (Pass or Fail) on comprehensive examinations to Graduate Office.
May (first Friday)	Last day for professors to assure Graduate Office that candidates planning to graduate in May will receive a grade of C or better for all course work taken during final semester.
June (first Friday)	Last day to file letter of intent to graduate in August. Due date for the graduation fee to be paid by check or money order to "Graduate Commencement Fund." (This is sent to the Graduate Office.)

Programs and Degree Requirements

Programs and degree requirements for all Schools are presented in the following pages. The Schools are arranged alphabetically, thus:

School of Arts and Letters
School of Education
School of Health and Physical Education
School of Music
School of Sciences and Mathematics
School of Social and Behavioral Sciences

Within each School, departments are presented alphabetically.

School of Arts and Letters

John W. Clokey, *Dean*
Powell S. Thomas, *Associate Dean for Graduate Studies*

Department of Art
Department of English
Department of Foreign Languages
Department of Philosophy
Department of Speech and Theatre
Department of Speech Pathology and Audiology

Degree Programs Offered:

Master of Education in
- English
- French
- German
- Latin
- Spanish

Master of Arts in
- English
- French
- German
- Latin
- Spanish
- Philosophy
- Teaching English as a Second Language

Art

Mr. McKinney, Chairman

ASSOCIATE PROFESSORS
Jack G. Hawthorne, B.A., M.Ed., M.F.A.
Pamela R. Hemphill, B.A., Ph.D.
Perry F. Hoberg, B.F.A., B.S., M.A.
Robert D. McKinney, B.S., M.Ed.
Frances W. Ring, B.S., Ed.M.
Edward B. Stein, B.S., M.F.A.

ASSISTANT PROFESSORS
Billy S. Newman, B.S., M.Ed.
William J. Rarick, B.A., M.F.A.

OFFERINGS IN ART

Symbol: Art (Open to All Curricula)

516 Painting I (3)
Individual expression in painting. Compositional elements considered. Experimentation is encouraged.

521 Sculpture I (3)
Individual creative expression in three-dimensional design. Work in wood, clay, plaster, metals, and other media.

525 Multi-Media Workshop in Sculpture (3)
Exploration of materials, tools, and techniques used in casting nonferrous materials: bronzes, brass, copper, lead, and plastics.

531 Ceramics I (3)
Materials, techniques, and processes through experimentation with the plastic character of clay. Clay bodies, glazes, textures, and kiln firing. Design is treated as an outgrowth of the ceramic process.

551 Art Education in the Elementary School (3)
Current trends in art education for the elementary school. (For elementary education majors.)

565 Workshop in Crafts (3)
Explores materials and techniques for enameling, jewelry (including casting), batik, and mosaic.

576 Primitive Art (3)
Ritual and myth from prehistory to early Ancient Near East; contemporary primitive cultures; psychological and psychoanalytical interpretations; comparison with phenomenon of primitivistic interests of the West.

580 European and U.S. Art (3)
For the student who is deficient in art history and wishes to augment his field (i.e., social studies, literature, philosophy). Analysis of the major forms and styles from the Renaissance to the present.

581 The Artist and Society (3)
Personal statement of the student's commitment to art. The nature of the creative impulse; the necessity to society of creative production.

595 Latin American Art (3)
Interpretation of 20th century environmental architecture and decoration with relationship to cultural development in Latin America.

597 History of Aesthetics and Art Criticism (3)
Philosophical theories of art production from Ancient Greece through the 19th century. Relationship of aesthetic experience to forms and to technical, psychological, and cultural values.

English

Dr. McKenty, Chairman
Dr. Bailey, Coordinator for Graduate Studies in English

PROFESSORS
Dorothy D. Bailey, B.A., M.A., Ph.D.
Thomas E. Berry, A.B., A.M., Ph.D.
William N. Garrett, A.B., Ph.D.
J. Bernard Haviland, B.A., M.A., Ph.D.
Wayne Hayward, B.A., M.A., Ph.D.
William H. Henry, A.B., Ed.M., A.M., Ph.D.
Alice B. Markow, A.B., A.M., Ph.D.
David E. McKenty, B.S., M.A., Ph.D.
Katharine D. Newman, B.S., M.A., Ph.D.
Bernard S. Oldsey, B.A., M.A., Ph.D.
S. Keith Taylor, B.A., M.A., Ed.D.
Powell S. Thomas, B.A., A.M., Ph.D.
Robert H. Weiss, A.B., A.M., Ph.D.
Theodora Lee West, B.A., M.A., Ph.D.

ASSOCIATE PROFESSORS
Michael W. Brooks, B.A., M.A., Ph.D.
Joseph Falgie, Jr., B.A., M.A., Ph.D.
William D. Fordyce, A.B., A.M.T., A.M., Ph.D.
Paul D. Green, A.B., A.M., Ph.D.
John T. Kelly, B.S., M.A., Ph.D.
John P. Kent, B.A., M.A., Ph.D.
Lynette F. McGrath, B.A., B.A., M.A., Ph.D.
Elsie B. Ziegler, B.S., M.S.L.S., Ed.D.

ASSISTANT PROFESSOR
Dwight L. McCawley, B.A., M.A., Ph.D.

The Department of English presents two degree programs: the Master of Education and the Master of Arts. The Master of Education program provides for continued study in English and American literature and language, and in professional education. The Master of Arts program provides for continued study toward the Ph.D.; it also provides a sound basis for teaching in secondary schools, community colleges, and junior colleges.

MASTER OF EDUCATION IN ENGLISH
(34 Semester Hours)

In addition to meeting the general College requirements for the master's degree at West Chester, the candidate must:

1. Pass the Graduate Record Examination (morning and afternoon tests) and satisfy departmental requirements for admission to the degree program.
2. Pass a written comprehensive examination. Areas tested are distributed as follows:
   - I English Language History and Old and Middle English Literature;
   - II Renaissance and 17th-Century English Literature;
   - III 18th- and 19th-Century English Literature;

IV American Literature to 1900;

V Modern Literature (English, American, Continental);

VI Linguistics and Teaching Methodology.

The examination is offered the second Wednesday of November, April, and July. If a student fails it twice, he must petition the Department of English for the opportunity of attempting it a third and final time.

3. Complete a program of courses under departmental advisement. Whenever deficiencies seem evident, the candidate may be advised to take additional graduate and/or undergraduate courses.

4. Satisfy all course and examination requirements of the School of Education.

The M.Ed. curriculum is arranged as follows:

		Semester Hours	
I	REQUIRED ENGLISH COURSES		6
	Eng 500 Methods and Materials of Research (Must be taken at or before the completion of 9 graduate credits.)	3	
	Eng 501 Modern Techniques for the Teaching of English	3	
II	ELECTIVES IN ENGLISH LANGUAGE AND LITERATURE As part of his elective quota, the student may, under advisement, take up to 6 hours of 400-level undergraduate courses that have been approved for graduate credit. Consult the adviser.		18
III	REQUIRED COURSES IN EDUCATION (See Page 85—School of Education)		10

MASTER OF ARTS IN ENGLISH
(30 Semester Hours)

In addition to meeting the general College requirements for the master's degree at West Chester, the candidate must:

1. Pass the Graduate Record Examination (morning and afternoon tests) and satisfy departmental requirements for admission to the degree program.

2. Pass a written comprehensive examination. Areas tested are distributed as follows:

I English Language History and Old and Middle English Literature;

II Renaissance and 17th-Century English Literature;

III 18th- and 19th-Century English Literature;

IV American Literature to 1900;

V Modern Literature (English, American, Continental).

The examination is offered the second Wednesday of November, April, and July. If a student fails it twice, he must petition the Department of English for the opportunity of attempting it a third and final time.

3. Demonstrate ability to read one of the following modern languages: German, French, Russian, Spanish, or Italian. Under advisement, another foreign language may be substituted. This requirement must be satisfied in advance of the comprehensive examination.

4. Complete a program of courses under departmental advisement. Whenever deficiencies seem evident, the candidate may be advised to take additional graduate and/or undergraduate courses.

The M.A. curriculum is arranged as follows:

		Semester Hours
I	REQUIRED Eng 500 Methods and Materials of Research (Must be taken at or before the completion of 9 graduate credits.)	3
II	ELECTIVES IN ENGLISH LANGUAGE AND LITERATURE As part of his elective quota, the student may, under advisement, take up to 6 hours of 400-level undergraduate courses that have been approved for graduate credit. Consult the adviser.	21-27
III	OPTIONAL ELECTIVES The student may take up to 6 hours in related fields.	0-6

OFFERINGS IN ENGLISH

See also Linguistics

Graduate English courses listed in the 500 series are lecture courses; those in the 600 series, seminars. This distinction in numbering indicates pedagogical procedure rather than level of difficulty.

Symbol: Eng

500 Methods and Materials of Research (3)
Basic techniques and procedures in research. The major types of research and the methods of locating, evaluating, and interpreting evidence. Includes the preparation of a research outline and paper.

501 Modern Techniques for the Teaching of English (3)
Techniques of teaching language arts, composition, and literature in the secondary school. Practice in planning and designing units and courses of study.

502 History of the English Language (3)
Review of the major influences on the development of the English language.

503 Old English Language and Literature (3)

An introductory study of the language through a reading of selected religious and secular poetry and prose. PREREQ: Eng 502 or permission of instructor.

507 Middle English Language and Literature (3)

An introductory study of the language (1150-1450) through a reading of selected texts (exclusive of Chaucer). PREREQ: Eng 502 or permission of instructor.

508 English as a Second Language (3)

Implications of the nature of language in teaching English to speakers of other languages. Methods and materials for teaching English as a second language. PREREQ: Lin 501 or permission of instructor.

510 Modern English (3)

A study of the development of the English language from 1450 to the present (exclusive of American English). PREREQ: Eng 502 or permission of instructor.

519 Studies in American English (3)

Historical processes in the development of American and British English. Regional and social dialects of American English. Usage and sociolinguistics. PREREQ: Eng 502 or permission of instructor.

580 English Language Workshop (1-4)

Workshop to survey recent developments and newer concepts in English linguistics for teachers. Variable structure and credit, by arrangement with individual school districts.

LITERATURE

Symbol: Lit

511 History of Criticism I (3)

An historical study of literary criticism and aesthetic theory from Aristotle to Johnson.

512 History of Criticism II (3)

An historical study of major texts and movements in literary criticism from Sainte-Beuve to Hartman and contemporaries.

514 American Literary Movements (3)

Major movements in the development of American literature. Influence of leading writers on literary concepts, trends, and critical dicta.

515 Comparative Literature (3)

Studies in international literary and cultural relations; the characteristics and relations of universal literary types, themes, and genres.

516 Major 20th-Century American Poets (3)

Robinson, Frost, Pound, Eliot, Crane, Stevens, Cummings, Williams, and others. Critical standards and theories of poetry in the century.

519 Major 20th-Century Irish Writers (3)

A comprehensive study of significant Irish writers of the 20th century: Yeats, Joyce, O'Casey, Synge, O'Connor, O'Faolain.

520 19th-Century British Novel (3)

The novel from Scott to Hardy.

521 English Literature to Chaucer (3)

Significant figures beginning with the Old English Period and closing with the Pearl Poet.

522 Chaucer (3)

A study of a selection of the *Canterbury Tales* and of *Troilus and Criseyde.*

524 British and Continental Short Story (3)

The short-story form; its origin and development. Current trends. Influences of German, French, and Russian writers upon the British form.

525 Biography (3)

Survey of biographical writings from Plutarch to the present. Origins and trends.

526 16th-Century Poetry and Prose (3)

A survey of the major poetry and prose written in England during the Tudor period: Skelton to Shakespeare.

527 17th-Century Poetry and Prose (3)

A study in depth of the major 17th-century English poets and prose writers from Donne to Milton.

529 Victorian Poetry and Prose I (3)

A study in Victorian poetry and prose (exclusive of the novel) to 1870: Tennyson, Browning, Ruskin, Arnold, Carlyle, Newman, Darwin, Swinburne.

530 Victorian Poetry and Prose II (3)

A study in the Victorian poetry and prose (exclusive of the novel) of the later 19th century: Hopkins, Pater, Morris, Wilde, Shaw, Hardy.

531 Shakespeare's Predecessors in Drama (3)

Development of the drama from classical antiquity to Shakespeare. The nature, structure, and other aspects of the principal types of pre-Shakespearean drama.

533 Romantic Poetry and Prose (3)

The poetry and prose of the early 19th century with emphasis upon the five major poets (Wordsworth, Coleridge, Byron, Shelley, and Keats) and three major essayists (Lamb, Hazlitt, and De Quincey).

535 20th-Century American Writers (3)
Major writers and literary movements from 1900 to the present.

536 20th-Century Drama (3)
Principal British and American playwrights from Shaw to Pinter and Albee.

539 18th-Century Poetry and Prose (3)
A study of the literature of the era, with emphasis on the cultural context, aesthetic theory, and the evolution of poetic techniques.

540 Restoration and 18th-Century Drama (3)
Critical history of British drama from the reopening of the theaters to Sheridan. Major playwrights and study of theater history.

543 Shakespeare's Comedies and Poems (3)
Nine comedies analyzed. The poems read in relation to Shakespeare's developing dramatic and poetic power.

544 Shakespeare's Tragedies and Histories (3)
Four histories and seven tragedies read with analysis of dramatic and poetical effects.

547 Jacobean and Caroline Drama (3)
English dramatic literature from 1603 to 1642. Includes Jonson, Marston, Webster, Chapman, Middleton, Rowley, Tourneur, Ford, Shirley, Beaumont, and Fletcher.

550 Literature for the Elementary School (3)
The content and approach of the literature program in the elementary school.

551 Literature for the Secondary School (3)
An examination of the literary interests of the secondary school student. A discussion of the works of major writers who appeal to the teen-age student.

552 Modern Afro-American Literature (3)
An intensive study in themes and trends in modern Afro-American literature.

SEMINARS

Symbol: Lit

601 Seminar: Applied Literary Criticism (3)
Study of various methods of literary analysis, with emphasis on the application of these methods in response to specific works of literature chosen from the principal genres of poetry, fiction, and drama.

605 Seminar: Spenser and Milton (3)
The major works of Spenser and Milton studied in relation to the intellectual climate of the Renaissance. Emphasis on *The Faerie Queene* and *Paradise Lost.*

606 Seminar: Beowulf (3)
An analysis of the entire poem in Old English. Emphasis on the artistic, linguistic, and historic values. PREREQ: Eng 503 or equivalent.

607 Seminar: Major Renaissance Writers (3)
A study in depth of five major figures in the Renaissance. Intellectual background and literary influences.

617 Seminar: Literary Spokesmen for American Ideas (3)
Intensive study of American writers who have depicted and interpreted major intellectual currents in American culture. Modern writers who deal with problems of American life.

623 Seminar: 18th-Century British Novel (3)
A study of the rise of the novel and its development in the 18th century. Major novelists treated: Defoe, Richardson, Fielding, Smollett, Sterne.

632 Seminar: Hemingway and Faulkner (3)
The works of Hemingway and Faulkner and the literary relationship of these works.

634 Seminar: Twain and James (3)
The works of Mark Twain and Henry James.

637 Seminar: Emerson and Thoreau (3)
The works of Emerson and Thoreau; writers associated with them.

638 Seminar: Hawthorne and Melville (3)
A study of their works and of representative literary criticism.

646 Seminar: Shakespearean Literary Criticism (3)
Survey of Shakespearean critical schools; student analysis of a play's interpretation or an interpretive problem.

690 Seminar in English Literature (3)
Topic announced whenever offered.

695 Seminar in American Literature (3)
Topic announced whenever offered.

Foreign Languages

Dr. Roberts, Chairman
Dr. Lombardi, Graduate Coordinator

FRENCH

PROFESSORS
Madelyn Gutwirth, B.A., M.A., Ph.D.
Alfred D. Roberts, B.A., M.A., Ph.D.

ASSOCIATE PROFESSOR
Marianne H. Kulaski, B.A., M.A.

ASSISTANT PROFESSOR
Robert Greene, A.B., A.M.

GERMAN

ASSOCIATE PROFESSOR
Richard A. Schneider, M.A.

ASSISTANT PROFESSOR
Alois H. Kulhanek, B.S., M.A.

LATIN

PROFESSOR
Walter E. Frieman, Jr., B.S., S.T.B., S.T.M., Th.D.

SPANISH

PROFESSORS
Ronald P. Lombardi, B.S., M.A., Ph.D.
Benjamin Nunez, B.A., M.A., Ph.D.
Philip D. Smith, Jr., B.A., M.A., Ph.D.

ASSOCIATE PROFESSORS
Jorge Escorcia, B.A., M.A.
Julia Puerta, B.S., B.A., M.A.

The Department of Foreign Languages offers two degree programs, one leading to the Master of Education in French, Spanish, German, or Latin, and the other to the Master of Arts in those languages.

REQUIREMENTS FOR THE GRADUATE RECORD EXAMINATION

The Graduate Record Examination is required for both degree programs. Degree candidates must submit satisfactory scores in the morning and afternoon tests at or before the completion of six credits of graduate work.

MASTER OF EDUCATION IN FRENCH, SPANISH, GERMAN, OR LATIN (34 Semester Hours)

The candidate for the M.Ed. program must meet the following requirements:

			Semester Hours
I	REQUIRED COURSES		6
	Lan 500	Methods and Materials of Research	3
	Lan 503	Techniques of Foreign Language Teaching	3

II	AREA OF CONCENTRATION Select at least one course each from Groups A, B, C, and D. (Latin majors choose 18 semester hours from Groups A and B under advisement.) Under advisement, selections may also be made from offerings listed below under "Courses Common to All Languages."	18
III	REQUIRED COURSES IN EDUCATION (See Page 85–School of Education)	10

MASTER OF ARTS IN FRENCH, SPANISH, GERMAN, OR LATIN (30 Semester Hours)

The candidate for the M.A. degree with a major in French, Spanish, German, or Latin must meet the requirements shown below:

AREA OF CONCENTRATION WITH THESIS

			Semester Hours
A.	Required Area		21
	Group A–Course 511 in the respective language	3	
	Group B–under advisement	6	
	Group C–under advisement	6	
	Group D–under advisement	6	
	(Latin majors choose 21 semester hours from Groups A and B under advisement.)		
	Under advisement, selections may also be made from offerings listed below under "Courses Common to All Languages."		
B.	Thesis (Lan 610)		6
C.	Elective Area (in Area of Concentration)		3

OR

AREA OF CONCENTRATION (NON-THESIS)

A.	Required Area (see A. above)	21
B.	Elective Area (in Area of Concentration)	9

The candidate for the M.A. degree must pass a reading examination in a second foreign language or must have taken and passed at least one graduate-level course in a second foreign language.

COURSES COMMON TO ALL LANGUAGES

Lan 500 Methods and Materials of Research
Lan 502 Second Languages in the Elementary School
Lan 503 Techniques of Second Language Teaching
Lan 504 Use of Media in Language Teaching
Lan 550 Seminar in Methods and Materials of Research
Lan 580 Seminar in Second Language Education
Lan 585 Institute in Second Language Education
Lan 590 Independent Study
Lan 600 Research Report
Lan 610 Thesis

FRENCH

Group A

511 Romance Philology (French)
512 Explication de Textes
513 Phonetics
514 Advanced Grammar and Stylistics
515 French Civilization
516 Exercices de Style

Group B

520 Rabelais
521 Moliere
522 Voltaire
523 Rousseau
524 Balzac
525 Proust

Group C

530 French Classical Tragedy
531 The French Novel (through the 19th Century)
532 The 20th Century French Novel
533 French Lyric Poetry
534 The Contemporary French Theater

Group D

540 Medieval French Literature
541 French Literature of the Renaissance
542 Studies in the 17th Century
543 Studies in the 18th Century
544 Studies in the 19th Century

GERMAN

Group A

511 German Philology
513 Phonetics
514 Advanced Grammar and Stylistics
515 German Civilization

Group B

520 Goethe
521 Schiller
522 Rilke
523 George
524 Thomas Mann
525 Bertolt Brecht
526 Kafka

Group C

531 The 20th Century German Novel
532 The Novelle
533 German Lyric Poetry
534 German Drama of the 19th Century
535 German Drama of the 20th Century

Group D

540 German Literature of the Middle Ages
541 Poetry of the Reformation and the Baroque Period
542 The Enlightenment and Storm and Stress
543 The German Romantics
544 19th Century German Realism
545 The German Expressionists

LATIN

Group A

503 Techniques of the Teaching of Latin
511 Comparative Grammar and Syntax of Greek and Latin
512 History of the Latin Language
514 Advanced Latin Prose Composition and Translation

Group B

513 Italic Dialects
515 Seminar in Greek and Roman Civilization
520 Works of Julius Caesar (Advanced Course)
521 Cicero's Philosophical Essays
525 Latin Metre and Verse
526 Greek and Latin Epic
527 Roman Historiography
528 Roman Satire
529 The Latin Novel
530 Medieval Latin Literature
531 Latin Epigraphy
532 Roman Archaeology
533 Historical Numismatics
534 Geography of Ancient Greece and Italy
535 Seminar in Interpretation of Latin Literature
536 Literary Criticism in Antiquity

SPANISH

Group A

510 Advanced Spanish Phonetics
511 Romance Philology (Spanish)
512 Advanced Grammar and Stylistics
514 Spanish Civilization

Group B

520 Cervantes
521 Juan Ruiz, Arcipreste de Hita
522 Lope de Vega
523 Galdos
524 Valera
525 Unamuno

Group C

530 Spanish Comedia of the Golden Age
531 The Spanish Novel before Cervantes
532 The Picaresque Novel
533 The Generation of 1898
534 Spanish Lyric Poetry

Group D

540 Medieval Spanish Literature
541 The Renaissance in Spain
542 Spanish Romanticism
543 Contemporary Spanish Theater
544 Masterpieces and Movements in Spanish Literature
545 The Latin American Novel

OFFERINGS IN FOREIGN LANGUAGES

See also Linguistics

COURSES COMMON TO ALL LANGUAGES

Symbol: Lan

500 Methods and Materials of Research (3)
Techniques of research in foreign language education including sources, design, interpretation, evaluation, and reporting of data.

502 Second Languages in the Elementary School (3)
Problems in teaching second languages in the elementary school. Curriculum design, bilingual education, classroom techniques, articulation, materials, testing. Preferably, Lin 501 or equivalent should precede Lan 502.

503 Techniques of Second Language Teaching (3)
Advanced course in recent theoretical bases; methods for teaching beginning and advanced levels; curriculum design and evaluation. PREREQ: Lin 501 or equivalent.

504 Use of Media in Language Teaching (3)
Role of media in language instruction including the tape recorder, language laboratory, television, and the computer.

550 Seminar in Methods and Materials of Research (3)
The principal tools of research in the field of foreign languages and literatures. Methods of conducting and reporting research, emphasizing correctness of form and mechanics of scholarly writing.

580 Seminar in Second Language Education (1-4)
Specialized workshop seminar devoted to a particular area of foreign language education.

585 Institute in Second Language Education (4-8)
In-depth study of a particular area of foreign language education.

590 Independent Study (1-3)

600 Research Report (1-2)

610 Thesis (6)

FRENCH

Symbol: Fre

511 Romance Philology (French) (3)
Historical development of French phonology and morphology from their beginnings to the present. Old French dialects.

512 Explication de Textes (3)
This French technique of textual and stylistic analysis is studied and practiced.

513 Phonetics (3)
Mastery of pronunciation and intonation of the French language through use of the phonetic alphabet. Laboratory drill with recordings of leading phoneticians.

514 Advanced Grammar and Stylistics (3)
A conceptual approach to French grammar. Principles of French grammar and syntax; evaluation of recent changes in grammar and usage.

515 French Civilization (3)
French civilization as reflected in its art, music, philosophy, and socio-political structure.

516 Exercices de Style (3)
A study of French literary styles and the language of French literary criticism.

520 Rabelais (3)
Rabelais: critical studies of his life and works.

521 Moliere (3)
The plays of Moliere; his life and times. History of comedy in France.

522 Voltaire (3)
Major works of Voltaire. Analytical scrutiny of his philosophical views. The impact of Voltaire on the character of Western civilization.

523 Rousseau (3)
The works of Rousseau; their philosophical implications and stylistic character. Analysis of the important critical writings on Rousseau.

524 Balzac (3)
The works of Balzac and a review of Balzacian criticism.

525 Proust (3)
Reading and analysis of "A la Recherche du Temps Perdu." Survey of Proustian criticism; Proust the man. His place in the history of the novel.

530 French Classical Tragedy (3)
The tragedies of Corneille and Racine; the history of tragedy in France.

531 The French Novel (Through the 19th Century) (3)
History of the novel in France. The works of the major French novelists of the 19th century: Hugo, Stendhal, Balzac, Flaubert, Zola.

532 The 20th Century French Novel (3)
The French novel in the 20th century and the philosophical, social, and aesthetic doctrines which helped to shape this literary form.

533 French Lyric Poetry (3)
Evolution of French lyric poetry, with stress on the 19th century. Forms, techniques, rules of French versification.

534 The Contemporary French Theater (3)
Principal dramatic works of the 20th century, analyzed against the history of the theater in France.

540 Medieval French Literature (3)
Selected literary masterpieces representing the various medieval genres: lyric poetry, epic, romance, allegory, fabliaux, prose chronicle, and drama.

541 French Literature of the Renaissance (3)
Evolution of literary doctrine in the French Renaissance. Influence of various philosophical and aesthetic currents such as Platonism and Petrarchism.

542 Studies in the 17th Century (3)
Selected writers and their works. Development of literary and aesthetic doctrines of the classical period.

543 Studies in the 18th Century (3)
Selected masterpieces of the 18th century. Evolution of social and political ideas as reflected in the literary activity of the period.

544 Studies in the 19th Century (3)
Selected writers of the 19th century in France. An examination of the literary doctrines which evolved through the century.

GERMAN

Symbol: Ger

511 German Philology (3)
German phonology and morphology from their beginnings to the present. Chief characteristics of Gothic, Old Saxon, and Old High German. Analysis of the language of the Low German Heliand and the earliest High German documents.

513 Phonetics (3)
The sounds, forms, and structure of modern standard German, using recorded materials and selected texts.

514 Advanced Grammar and Stylistics (3)
Stylistic qualities of modern German, analyzed in selected texts. Oral and written drill.

515 German Civilization (3)
Social structure of Germany; evolution of its institutions; German achievements in the arts.

520 Goethe (3)
Goethe's works and his development toward classicism. Critical works dealing with his life and writings.

521 Schiller (3)
Schiller's dramatic works and his development toward classicism. Critical works dealing with his life and writings.

522 Rilke (3)
Rilke's poetical works and major critical works which deal with his life and writings.

523 George (3)
George's poetry and major critical works dealing with his life and writings.

524 Thomas Mann (3)
The novels of Mann; works dealing with his life and writings.

525 Bertolt Brecht (3)
The theater of Brecht and critical literature dealing with his life and writings.

526 Kafka (3)
The works of Kafka; criticism dealing with his life and writings.

531 The 20th Century German Novel (3)
The works of the major novelists with particular attention to the writers of "Gruppe 47" (post-World War II writers).

532 The Novelle (3)
The German short story from Goethe to the present, including the German Feuilleton and the post-World War II writers.

533 German Lyric Poetry (3)
Major representative poets of the 19th and 20th century.

534 German Drama of the 19th Century (3)
The works of the major German dramatists of the 19th century.

535 German Drama of the 20th Century (3)
The works of the major dramatists of the 20th century with attention to expressionism and post-World War II dramatists.

540 German Literature of the Middle Ages (3)
German literature of the Middle Ages with emphasis on the Popular and Court Epic and the lyric poetry of the Golden Age.

541 Poetry of the Reformation and the Baroque Period (3)
Literary trends in the Reformation and the Baroque Period.

542 The Enlightenment and Storm and Stress (3)
The masterpieces of the Enlightenment and Storm and Stress. Attention given to English influences, especially Shakespeare.

543 The German Romantics (3)
Selected writers of the German Romantic period.

544 19th Century German Realism (3)
Masterpieces of the German Realists of the 19th century.

545 The German Expressionists (3)
Major representative poets of the expressionistic movement.

LATIN

Symbol: Lat

503 Techniques of the Teaching of Latin (3)
Survey and analysis of texts and other materials for teaching Latin. Recent methods for elementary and secondary levels. Curriculum for the secondary level.

511 Comparative Grammar and Syntax of Greek and Latin (3)
The relation of Greek to Latin within the Indo-European family of languages. Survey of the external histories of Greek and Latin. Greek and Latin phonology and morphology with references to principles of syntax.

512 History of the Latin Language (3)
Development of the Latin language from the earliest inscriptions to the 9th century A.D., with some consideration of the prehistoric language and people of Rome.

513 Italic Dialects (3)
The Italic branch of the Indo-European family of languages, exclusive of Latin: Oscan and Umbrian grammar. Italic inscriptions. Brief survey of other dialects.

514 Advanced Latin Prose Composition and Translation (3)
Intensive review of Latin syntax, with translation of English passages into Latin and vice versa.

515 Seminar in Greek and Roman Civilization (3)
A study of literary texts and archaeological documents illustrative of the Greek mind and/or the Roman genius.

520 Works of Julius Caesar (Advanced Course) (3)
The Alexandrine, African, Spanish, Gallic, and Civil Wars, with reference to their political backgrounds.

521 Cicero's Philosophical Essays (3)
Studies in the *Somnium Scipionis, Tusculan Disputations, De Natura Deorum* and *De Officiis*, with reference to Cicero's political theory and practice.

525 Latin Metre and Verse (3)
The formal structure and development of Latin verse from its beginnings to the 20th century. Illustrative readings in early, classical, medieval, and modern Latin poetry.

526 Greek and Latin Epic (3)
The Greek epic from Homer to Apollonius of Rhodes and the Latin epic from Naevius to Vergil. Readings from the classical epics.

527 Roman Historiography (3)
Selections from Sallust, Caesar, Livy, Tacitus, and Suetonius. Origins, development, and influence of Roman historiography.

528 Roman Satire (3)
History of Roman satire and the development of Lucilian Satire. A comparative study of the satires of Horace, Persius, and Juvenal.

529 The Latin Novel (3)
Emergence and development of the Latin novel. Readings in Petronius' *Cena Trimalchionis*, Seneca's *Apocolocyntosis*, the Pompeian Inscriptions, and Apuleius' *Metamorphoses.*

530 Medieval Latin Literature (3)
Latin poetry and prose from the 4th to the 17th centuries, with emphasis on the acquisition of good reading knowledge of medieval Latin in different periods and styles.

531 Latin Epigraphy (3)
Latin inscriptions from the earliest period to the 8th century A.D. A study of the development of the Latin language.

532 Roman Archaeology (3)

The relics of Roman civilization and culture in Italy, Africa, Spain, France, and Britain.

533 Historical Numismatics (3)

Greek, Roman, and Near-Eastern coins and medals which document Mediterranean history.

534 Geography of Ancient Greece and Italy (3)

Readings in ancient geographers including Claudius Ptolemy and Strabo, with attention to the latter's method.

535 Seminar in Interpretation of Latin Literature (3)

Study of various modern approaches to Latin literature. Analysis of selected passages or themes from selected authors.

536 Literary Criticism in Antiquity (3)

Study of selected authors or works with reference to both ancient and modern (e.g., Horace and Quintilian) criticism and interpretation.

SPANISH

Symbol: Spa

510 Advanced Spanish Phonetics (3)

Theoretical and practical approach to phonology, phonetics, and phonetics transcription. Regional and dialectical variations, using Tomas Navarro Tomas' *Manual de pronunciacion espanola.*

511 Romance Philology (Spanish) (3)

The development of Old Spanish from Vulgar Latin and Protoromance, with analysis of Spanish phonology, morphology, and syntax. Readings in Old Spanish.

512 Advanced Spanish Grammar and Stylistics (3)

An informal rapid review of Spanish grammar, with emphasis on problems fundamental to the American classroom. Exercises include idiomatic expression, various levels of style, and translation.

514 Spanish Civilization (3)

Major philosophical and artistic contributions of the Hispanic world to Western civilization. Spain's social and economic institutions, and the character of her people as reflected in the arts.

520 Cervantes (3)

Life and works of Miguel Cervantes Saavedra: *Novelas ejemplares, Ocho comedias y ocho entremeses, La Numancia, La Galatea*, all of which lead to study of the meaning, philosophy, and influence of *Don Quixote.*

521 Juan Ruiz, Arcipreste de Hita (3)

The *Libro de Buen Amor* as a major work in Spain's poetic development.

522 Lope de Vega (3)

The Spanish *comedia,* viewed as an expression of the Spanish people. The popular and national elements of this theater. Lope de Vega as the chief innovator and leading figure of the first half of the Golden Age.

523 Galdos (3)

Benito Perez Galdos: his novels of social reform, enlightenment, and conversion.

524 Valera (3)

Juan Valera's psychological novels, set in 19th century Andalusia.

525 Unamuno (3)

The philosophical ideas of Unamuno studied in his critical essays, plays, and novels.

530 Spanish Comedia of the Golden Age (3)

Survey of the "Comedia" before Lope de Vega; the contributions of Lope de Vega; Tirso de Molina and Ruiz de Alarcon; the Baroque theater of Pedro Calderon de la Barca.

531 The Spanish Novel Before Cervantes (3)

Survey of the main trends of Spanish prose before Cervantes. The novels of chivalry, *El Conde Lucanor*, and the "novela sentimental."

532 The Picaresque Novel (3)

The picaresque novel as an indigenous creation of Spain; Lazarillo de Tormes, Guzman de Alfarache, Vida del Buscon; the picaresque novel as a tradition in Spain and an influence in other literature.

533 The Generation of 1898 (3)

The revitalizing forces which took hold in the late 19th century and a study of the works of Unamuno, Azorin, Menendez Pidal, Pio Baroja, Valle Inclan, Benavente, Martinez Sierra, and Ruben Dario.

534 Spanish Lyric Poetry (3)

Spanish lyric poetry, with emphasis on early forms, the Renaissance, Italianate forms, and the blossoming of lyric poetry in the 19th and 20th centuries.

540 Medieval Spanish Literature (3)

The *mester de juglaria* and the *Poema del Cid*; early related epics and the *mester de clerecia*; Spain's early historical chronicles. Beginnings of the Spanish theater.

541 The Renaissance in Spain (3)

Leading proponents of the humanistic spirit in Spain: Nebrija, Erasmus, the brothers Valdes. The Spanish Inquisition, the Renaissance theater and novel: Juan del Encina, Torres Naharro, and *la Celestina.*

542 Spanish Romanticism (3)

The Spanish Romantics and *costumbristas:* Duque de Rivas, Espronceda, Gomez de Avellaneda, Becquer, Larra, Mesonero Romanos. The dramatic novels of Pardo Bazan, Palacio Valdes, Clarin, and Galdos.

543 Contemporary Spanish Theater (3)

The "Ibsenite" and social dramas of the late 19th century represented by the plays of Lopez de Ayala, Jose Echegaray, and Galdos. The transition period headed by Martinez Sierra and the brothers Quintero. Spain's modernistic drama exemplified by Federico Garcia Lorca and Alejandro Casona.

544 Masterpieces and Movements in Spanish Literature (3)

A seminar on the development of Spanish thought and artistic expression through selected masterpieces of literature and art.

545 The Latin American Novel (3)

The development of the novel in Latin America. The colonial period, the period of independence, the romantic period; realism, modernism, *criollismo*, and naturalism.

Linguistics

(Interdepartmental Area)

Coordinators: Dr. Falgie and Dr. Smith

LINGUISTICS GROUP

Diane O. Casagrande
(Speech and Theatre)

W. Stephen Croddy
(Philosophy)

Joseph Falgie, Jr.
(English)

John T. Kelly
(English)

Benjamin Nunez
(Foreign Languages)

Willie E. Page, Jr.
(English)

Philip D. Smith, Jr.
(Foreign Languages)

Although presently the Graduate Program offers no degree in linguistics, students interested in building up a concentration in this area may elect courses from the following list. For additional information students are advised to consult one of the coordinators.

OFFERINGS IN LINGUISTICS

Lin 501 Introduction to Linguistics (3)

Basic concepts of language description, classification, change, reconstruction, dialectology, and sociolinguistics.

Lin 502 Descriptive Linguistics (3)

Analysis of the phonemic, morphological, and syntactic features of typologically divergent languages. Procedures for eliciting linguistically relevant data about a language from a native speaker. PREREQ: Lin 501 or equivalent.

Lin 503 Phonetics and Phonology (3)

Articulatory and acoustic descriptions of speech sounds and correlates. Phonemics, phonotactics, phonological systems, and problems in phonology. PREREQ: Lin 501 or equivalent.

Lin 504 Morphology and Syntax (3)

Identification of minimal meaningful linguistic units, the morphological composition of words and their syntactic arrangements in sentences. PREREQ: Lin 501 or equivalent.

Lin 505 Transformational Grammar (3)

Basic concepts of transformational theory and their application in teaching. PREREQ: Lin 501 or permission of instructor.

Lin 509 Contrastive Analysis (3)

Contrastive analysis of phonological, grammatical, lexical, and cultural features of languages. Interferences in second-language learning situations. PREREQ: Lin 501 or equivalent.

Lin 515 General Semantics (also Sph 515) (3)

See Sph 515.

Lin 523 Philosophy of Language (also Phi 523) (3)

See Phi 523.

Lin 580 Language and Culture (3)

Language as an aspect of culture; linguistic-perceptual-cognitive categories; social and psychological aspects of language. PREREQ: Lin 501 or permission of instructor.

Philosophy

Dr. Claghorn, Chairman

PROFESSORS
George S. Claghorn, B.A., Ph.D.
Thomas W. Platt, B.A., M.A., Ph.D.
Stanley Riukas, A.B., Ph.B., Ph.L., Ph.D.
Frederick R. Struckmeyer, B.A., A.M., Ph.D.

ASSOCIATE PROFESSOR
W. Stephen Croddy, B.A., M.A., Ph.D.

ASSISTANT PROFESSOR
Paul A. Streveler, B.A., Ph.D.

The Department of Philosophy offers a program leading to the Master of Arts in philosophy. This degree will serve as a foundation for studies leading to a Ph.D. in philosophy or prepare one for positions in industry, government, or college teaching.

ADMISSION TO THE PROGRAM

In addition to meeting general requirements for admission to a degree program at West Chester, applicants must present a minimum of 12 hours of undergraduate philosophy, including courses in history of ancient philosophy, history of modern philosophy, ethics, and logic.

FOREIGN LANGUAGE REQUIREMENT

Candidates for the M.A. must demonstrate a reading proficiency in French, German, or Spanish.

FINAL EXAMINATION REQUIREMENT

A comprehensive, written final examination is required. This will cover four fields: (1) Metaphysics; (2) Logic; (3) Ethics, Aesthetics, Philosophy of Language, Philosophy of Science, or American Philosophy; and (4) Plato, Aquinas, or Kant. For (3) and (4), the student will choose, under advisement, one of the fields listed.

MASTER OF ARTS IN PHILOSOPHY
(30 Semester Hours)

Candidates for the M.A. degree must meet the following requirements:

		Semester Hours
I	Required Courses	9
	Phi 511 Philosophic Concepts	3
	Phi 536 Symbolic Logic	3
	Phi 540, 541, or 542 Seminar	3

THESIS PROGRAM

II	Area of Concentration	9-12
III	Electives (Philosophy or related)	3-6
IV	Phi 610 Thesis	6

NON-THESIS PROGRAM

II	Area of Concentration	15-18
III	Electives (Philosophy or related)	3-6

OFFERINGS IN PHILOSOPHY

Symbol: Phi

510 Existentialism (3)

Background and themes of current existentialism, as reflected in Kierkegaard, Jaspers, Marcel, Heidegger, and Sartre. Evaluation of existentialism and its impact on contemporary literature, drama, art, and society.

511 Philosophic Concepts (3)

Basic concepts of the philosophic enterprise: form, matter, the categories, cause, and purpose. Relation of premises to method and conclusions. Rival theories are compared for justification and adequacy.

512 Contemporary Ethical Theories (3)

Examination of various ethical theories of our time: pragmatism, evolution, idealism, hedonism, natural law, and other schools. Practical applications are made to such problems as authority, punishment, rights, marriage, and race.

513 History of Aesthetics (3)

History of aesthetics, as seen in classic interpretations. Origins of art, psychological and sociological; the role of art works in the enrichment of life.

514 Philosophy of Religion (3)

Dominant trends in religious philosophy of the Western world. Religious language, reason and faith, science, the nature of man, the existence of God, and mysticism.

520 Philosophy of Mind (3)

The human mind, according to representative views. Presuppositions and implications, both scientific and philosophic, traced and analyzed. The mind-body problem; perception; memory; and the implications of depth psychology.

521 Philosophy of the Social Sciences (3)

Philosophic issues in the social sciences; laws, procedures, and prediction. The formation of concepts and theories; evaluation of evidence and cause; determination of patterns and goals.

522 Philosophy of Science (also Sci 522) (3)

The course begins with case studies in science and derives general principles from them. Scientific law, analogy, models, variant theories, confirmation, and interpretation.

523 Philosophy of Language (also Lin 523) (3)

Problems of language and oral communication, with emphasis on problems of meaning. PREREQ: Lin 501 or permission of instructor.

528 Colonial American Philosophy (3)

Early American views of man, the world, and history. European heritage, native adaptations, and developments preparing for the Revolution. Emphasis on Jonathan Edwards as a representative philosopher.

530 American Pragmatists (3)

Peirce, James, and Dewey; the origin, development, and nature of their philosophy; their influence on American life. Pragmatic views of knowledge, ethics, law, and society.

531 Oriental Philosophy (3)

Central figures and classic teachings of Eastern philosophy and religion: Islam, Hinduism, Buddhism, Confucianism, Taoism, and Shintoism; naturalistic and humanistic elements of decisive influence on the culture of the Orient.

536 Symbolic Logic (3)

Basic principles and methods of symbolic logic. Practice in determining validity of sentential and quantificational arguments. The algebra of classes.

540 Plato Seminar (3)

Plato's life, development, and doctrines. Several chief dialogues from the standpoint of critical interpretations.

541 Aquinas Seminar (3)

Major themes of St. Thomas from the *Summa Theologica* and the *Summa Contra Gentiles*. His view of man, the good, the beautiful, the true, the state, the world of Nature, and of God.

542 Kant Seminar (3)
A study of Kant's *Critique of Pure Reason*, with reference to his development and his contributions to ethics, aesthetics, and philosophy of religion.

610 Thesis (6)

Speech and Theatre

Dr. Morehouse, Chairman

PROFESSOR
William M. Morehouse, B.S., M.S., Ph.D.

ASSOCIATE PROFESSORS
Jay H. Berkowitz, B.S., M.A.
Diane O. Casagrande, A.B., M.A.
William F. Cope, B.F.A., M.A.

OFFERINGS IN SPEECH

Symbol: Sph

515 General Semantics (also Lin 515) (3)
Introduction to the relativistic language concepts of Korzybski and his followers. The course focuses on what language does to people and the subsequent effects on communication.

525 Communication in the Classroom: Models and Approaches (3)
For teachers in grades K-12 interacting together to share experiences and channel their thoughts into the development of speech communication activities which can fit into and enhance their present curricula.

550 Listening: Theory and Method (3)
A survey of research in listening behavior and related nonverbal variables. Identification of important characteristics of effective listeners. Application to communication activities in the classroom.

OFFERINGS IN THEATRE

Symbol: ThA

506 Theatre Theory and Production (3)
A survey of theatre history and practice. Students select specific areas of production and style for classroom presentation, analysis, and research.

516 Theory and Application of Creative Dramatics (3)
The use of creative dramatics as a teaching method. Research and application of theories and techniques.

536 Producing the Television Program [Nondramatic] (3)
Basic concepts of television planning and production for the nondramatic format. The student uses the tools of television. (Lecture and laboratory.)

537 Television Program Directing [Dramatic] (3)
Continuation and development of skills and knowledge in the use of television equipment; application of the arts of the theatre and film. (Lecture and laboratory.) PREREQ: ThA 536.

Speech Pathology and Audiology

Dr. Griffith, Chairman

PROFESSOR
Rita V. Griffith, B.A., A.M., Ph.D.

ASSOCIATE PROFESSORS
Lester F. Aungst, B.A., M.S., Ph.D.
Susan Maxwell, B.A., M.A.
Frank E. Peterson, B.S., M.A.
Vincent V. Suppan, B.S., M.A.

ASSISTANT PROFESSORS
John L. Eberhart, B.S., M.A.
Lynn H. Swingle, B.S., M.S.

OFFERINGS IN SPEECH PATHOLOGY AND AUDIOLOGY

Symbol: SpP

500 Survey of Speech Disorders (3)
Introduction to the definition, etiology, and management of functional and organic disorders of speech. (Formerly SpP 544.)

501 Foundations of Research in Speech Pathology (3)
An introduction to the scientific process and to the interpretation and application of research in the speech sciences. A research project outline required. (Formerly SpP 555.)

510 Articulation Disorders (3)

An in-depth study of current research and methodology in articulation to up-date the diagnostic and therapeutic skills of the speech clinician.

511 Voice Disorders (3)

Examination of classification, etiology, diagnosis and therapy for functional, organic, and psychological voice disorders.

512 Language Disorders (3)

An examination of the neurological, psycholinguistic, and social dimensions of language. Developmental and acquired language disorders discussed in terms of etiology and preventive and corrective therapy. (Formerly SpP 550.)

513 Stuttering (3)

Consideration of the nature, causes, diagnosis, and treatment of stuttering and related disorders of speech flow. Critical review of pertinent research.

515 Orofacial Anomalies (3)

Comprehensive consideration of the nature, causes, diagnosis and treatment of communication disorders associated with orofacial anomalies particularly cleft lip and cleft palate.

531 Therapy for the Hearing Impaired (3)

Evaluative and therapeutic materials and methods applicable to the improvement of communication in hard-of-hearing individuals.

560 Graduate Clinic Practicum in Speech Pathology (1)

Supervised practice in the Speech and Hearing Clinic and/or in affiliated clinics. Designed to increase diagnostic and therapeutic skills with children and adults who have communication problems. Must be repeated to fulfill requirements for Certificate of Clinical Competence (American Speech and Hearing Association). PREREQ: permission of instructor.

Interdisciplinary Program

MASTER OF ARTS IN TEACHING ENGLISH AS A SECOND LANGUAGE (30 Semester Hours)

Coordinators: Dr. Falgie and Dr. Smith

Diane O. Casagrande, Associate Professor of Speech
W. Stephen Croddy, Associate Professor of Philosophy
Joseph Falgie, Jr., Associate Professor of English and Linguistics
John T. Kelly, Associate Professor of English
Benjamin Nunez, Professor of Spanish and Linguistics
Willie E. Page, Jr., Associate Professor of English
Philip D. Smith, Jr., Professor of Spanish and Linguistics

The School of Arts and Letters offers the Master of Arts in Teaching English as a Second Language, an interdisciplinary program contributed to by the Departments of English, Foreign Languages, Philosophy, and Speech and Theatre. The program is designed for those who are preparing to teach English as a second language. It includes the application of linguistic principles, methodology, and appropriate cultural studies necessary for the successful teaching of English to persons whose native language is not English. The program also has relevance to the teaching of other languages as second languages, as well as to the teaching of a second dialect. Students wishing to enter the program must consult one of the coordinators.

In addition to meeting the general requirements for a master's degree at West Chester State College, the candidate must:

1. Submit satisfactory scores in the verbal and quantitative tests of the Graduate Record Examination at or before the completion of 6 semester hours of graduate work, and satisfy the requirements for admission to the degree program.
2. Demonstrate adequate proficiency in a foreign language. Non-native speakers of English must demonstrate adequate proficiency in English.

3. Pass a written and/or oral comprehensive examination, offered on the second Wednesday of November and April. After the completion of 24 semester hours of course work and no later than two weeks prior to the date of the examination, a student may file with the coordinators a written request to take the examination. A student who fails the examination twice must obtain the approval of the coordinators to take it a third and final time.

4. Fulfill the course requirements of the program and take any additional course work deemed necessary by the coordinators (e.g., admission deficiencies; cultural, language, or literary deficiencies in the student's second language; teaching of reading for students having no prior training in this area).

		Semester Hours
I	REQUIRED COURSES	21
	Lan 500 Methods and Materials of Research	
	Lan 502 Second Languages in the Elementary School	
	Lan 503 Techniques of Second Language Teaching	
	Lin 501 Introduction to Linguistics	
	Lin 502 Descriptive Linguistics	
	or	
	Lin 509 Contrastive Analysis	
	Eng 502 History of the English Language	
	Eng 508 English as a Second Language	
	(Students submitting equivalent undergraduate or graduate courses for any of the above may substitute, under advisement, courses from Group 1.)	
II	ELECTIVES (Under Advisement)	9
	Three courses from Group 1, or two courses from Group 1 and one from Group 2.	

Group 1

Eng 510 Modern English
Eng 519 Studies in American English
Lan 504 Use of Media in Language Teaching
Lan 590 Independent Study
Lan 600 Research Report
Lin 502 Descriptive Linguistics
Lin 503 Phonetics and Phonology
Lin 504 Morphology and Syntax
Lin 505 Transformational Grammar
Lin 509 Contrastive Analysis
Lin 580 Language and Culture
Phi 523 Philosophy of Language (also Lin 523)
Sph 515 General Semantics (also Lin 515)

Group 2

Eng 503 Old English Language and Literature
Eng 507 Middle English Language and Literature
Fre 511 Romance Philology (French)
Fre 515 French Civilization
Ger 511 German Philology
Ger 515 German Civilization
Spa 511 Romance Philology (Spanish)
Spa 514 Spanish Civilization

For descriptions of courses under this program see English (Eng); Foreign Languages (Lan. Fre, Ger, Spa); Linguistics (Lin); Philosophy (Phi); and Speech and Theatre (Sph).

School of Education

Harold W. Benda, *Dean*
John A. Lander, *Associate Dean*
Michael F. Bannon, *Associate Dean for Graduate Studies*

Department of Counselor Education

Dr. Smith, Chairman

PROFESSORS
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Edward D. Smith, B.S., M.Ed., Ed.D.

ASSOCIATE PROFESSORS
Joyzelle Clark, B.A., Ed.M.
Ronald L. Gottshall, B.S., M.A.
Saul H. Greenberg, B.S., M.Ed.
William J. Rahn, B.S., M.Ed.
Julian M. Swiren, B.S., M.S.

Department of Elementary Education

Dr. Ziegler, Chairman
Dr. Kulp, Assistant Chairman

PROFESSORS
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Carlos R. Ziegler, A.B., M.Ed., Ed.D.

ASSOCIATE PROFESSORS
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Ethel G. Haas, B.S., M.Ed.
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Robert W. Herres, B.S., M.A.
E. Riley Holman, B.S., M.S., Ed.D.
Carrie C. Kulp, A.B., M.Ed., Ph.D.
George W. Maxim, B.S., M.Ed., Ph.D.
Erminio J. Peta, B.S., M.Ed.
Carol A. Radich, B.A., M.Ed., Ph.D.

ASSISTANT PROFESSORS
Edward H. Gibson, B.S., M.Ed.
Patricia E. Grasty, B.S., M.Ed.
Ruth B. Petkofsky, A.B., M.A.

Department of Instructional Media Education

Dr. Weagley, Chairman

PROFESSORS
Chester L. McTavish, B.S., M.S., Ed.D.
Richard L. Strayer, B.S., M.Ed., Ed.D.
Richard P. Weagley, B.S., M.Ed., Ed.D.

ASSOCIATE PROFESSORS
David L. Redmond, B.S., M.S.
Joseph M. Spiecker, B.S., M.S.

ASSISTANT PROFESSOR
Jay P. Steinmetz, B.S., M.Ed.

Department of Secondary Education and Professional Studies

Dr. Mississyan, Chairman

PROFESSORS
Michael F. Bannon, B.S., M.A., Ed.D.
Harold W. Benda, B.A., M.A., Ed.D.
Mark M. Evans, B.Ph., M.Ed., Ph.D.
Charles W. Good, B.A., M.A., Ed.D.
Bernard M. Gross, B.S., M.Ed., Ed.D.
John A. Lander, B.S., A.M., Ph.D.
Robert S. Means, A.B., M.A., Ph.D.
Kegham A. Mississyan, B.A., M.A., Ph.D.
Walter N. Ridley, A.B., M.A., Ed.D.
George M. Thomas, B.S., M.Ed., Ed.D.

ASSOCIATE PROFESSORS
Luther R. Barth, B.S., M.Ed.
Harry H. Deischer, B.S., M.A., M.S., Ed.D.
Richard C. Gleockler, B.S., M.Ed.
Reynold D. Paganelli, B.S., M.A., C.A.S.

Educational Research

Dr. Peters, Coordinator

PROFESSORS
Martin J. Higgins, B.S., M.A., Ph.D.
Everett A. Landin, A.B., M.Ed., Ed.D.
Ernest L. Peters, A.B., M.A., Ed.D.

Reading

Dr. Gelfand, Coordinator

PROFESSORS
Jane K. Gelfand, B.S., M.A., Ed.D.
Joseph C. Hall, B.S., M.Ed., Ed.D.

ASSOCIATE PROFESSORS
K. Eleanor Christensen, B.A., M.A., Ph.D.
Mary A. Keetz, B.S., M.S., Ph.D.

Special Education

Dr. Freeman, Coordinator

PROFESSOR
Howard Freeman, B.S., M.A., Ed.D.

ASSOCIATE PROFESSOR
Martin Zlotowski, B.A., M.A., Ph.D.

ASSISTANT PROFESSOR
Deborah Nickles, B.S., M.S.

Urban Education

Mr. Leeds, Coordinator

ASSOCIATE PROFESSOR
F. William Leeds, A.B., M.A.

Laboratory School

PRINCIPAL, ASSOCIATE PROFESSOR
Gerald B. Cartright, B.S., M.Ed.

The School of Education, working cooperatively with the total College community, provides knowledge and skills for the teacher and seeks to further develop social, ethical, and professional attitudes necessary for teaching.

Degree programs offered by the School of Education lead to the Master of Science in Educational Research; the Master of Education in Counselor Education, Elementary Education, Instructional Media Education, and Reading; and the Master of Education in Secondary Education, with concentrations in 11 academic fields. This last program is given in cooperation with the Schools of Arts and Letters, Sciences and Mathematics, and Social and Behavioral Sciences.

The School of Education also provides course work for teacher certification and offers programs which certify educational media specialists, guidance counselors, and reading specialists.

Requirements for the programs are given below under the headings of departments or areas. The professional requirements for secondary education majors are found under the heading of the Department of Secondary Education and Professional Studies. Academic concentrations are given under the various departments of the three Schools embracing the arts and sciences. Requirements

for the Master of Science in educational research, which the School of Education offers in cooperation with the Bureau of Research and Related Services, appear following the Reading program.

SCHOOL OF EDUCATION OFFERINGS FOR ALL CURRICULA

Professional courses given in the School of Education are available to students in all curricula, subject to approval from the student's adviser and the School of Education. (Prerequisites shown in the descriptions should be noted.)

Department of Counselor Education

Dr. Smith, Chairman

The Department of Counselor Education offers a degree-certification program leading to the Master of Education and the Educational Specialist I Certificate for elementary school counselors and secondary school counselors.

A handbook describing the program in detail is available for prospective students, who may obtain copies from the Counselor Education office. Applicants receive a copy during the initial interview with the department chairman.

APPLICATION DEADLINES

The completed application materials should be received in the Graduate Office at least 60 days prior to the fall and spring registrations and 30 days prior to the first Summer Session. As soon as the materials reach the department chairman, he will arrange with the applicant for an interview.

CRITERIA FOR ADMISSION TO THE DEGREE-CERTIFICATION PROGRAM

The applicant must possess a bachelor's degree from an approved institution and present an undergraduate record showing an overall academic average of at least 2.5 and at least 2.75 in his concentration. The applicant must also have an average of 2.75 in a minimum of nine credits of guidance-related courses in areas of education, psychology, and sociology. The courses may include General Psychology, Educational Psychology, Tests and Measurements,

Human Development, and others as determined by an evaluation of the record by the department.

The applicant must obtain a satisfactory score on the Miller Analogies Test and show evidence of personal and professional qualities that indicate a potential for success in the Counselor Education program.

ENROLLMENT IN THE PROGRAM

Upon meeting admission criteria, the student will be accepted for Phase I of the program. During this phase the student will be evaluated for academic achievement and interpersonal relations.

DEGREE CANDIDACY

The student successfully completing Phase I and recommended to enter Phase II becomes a degree candidate for the remainder of the program. The student completes more advanced work in areas common to both elementary and secondary counselors and then enters a period of specialized course work and field experience.

COMPREHENSIVE EXAMINATION

Upon completion of the prescribed work and recommendation of the adviser, the student is eligible for the comprehensive examination.

THE DEGREE

The Master of Education degree will be granted when the student has met the standards established by the Graduate Council and by the Counselor Education Department.

CERTIFICATION

In order to obtain the Educational Specialist I Certificate, the student must successfully complete the required practicum. This course provides opportunity for the student to work closely with a professional counselor in a public school under the supervision of the director of the practicum at West Chester. The certificate is issued on the basis of the Program Approval status of the Counselor Education program at West Chester as granted by the Pennsylvania Department of Education.

SEQUENCE OF COURSES

A. PHASE I
   - Psy 501 Introductory Statistics for the Behavioral Sciences (2)
   - EdF 500 Methods and Materials of Research in Education (2)
   - EdF 510 Educational Foundations (3)
   - EdC 503 Introduction to Guidance Services (2)
   - EdC 567 Group Dynamics (2)

B. PHASE II
EdC 540 Evaluative Methods in Guidance I (2)
EdC 541 Evaluative Methods in Guidance II (2)
EdC 556 Career Development Theories and Practices (2)
EdC 571 Theories of Counseling (2)
Elective (2 or 3)

C. PHASE III (ELEMENTARY)
EdC 572 Counseling and Consultative Techniques in the Elementary School (2)
EdC 574 Group Procedures in the Elementary School (2)
EdC 568 The Professional Counselor in the Elementary School (2)
EdE 551 Child Development and Behavior I (3)
or or
EdE 553 Child Development and Behavior II (3)

PHASE III (SECONDARY)
EdC 573 Counseling and Consultative Techniques in the Secondary School (2)
EdC 575 Group Procedures in the Secondary School (2)
EdC 569 The Professional Counselor in the Secondary School (2)
EdS 569 Adolescent Development and Learning (3)

D. PHASE IV (DEGREE PROGRAM)
Elective (2 or 3)

PHASE IV (DEGREE-CERTIFICATION PROGRAM)
EdC 585 Contemporary Issues and Trends in Guidance (2)
EdC 590 Practicum (elementary and secondary sections) (3)

OFFERINGS IN COUNSELOR EDUCATION

EdC 503 Introduction to Guidance Services (2)

Historical development, philosophical foundations, and determinants of guidance services in contemporary elementary and secondary education. Special services, testing, group and individual counseling, and other elements. Guidance as a profession; ethics; current developments and trends.

EdC 540 Evaluative Methods in Guidance I (2)

Emphasis is on the assessment of intelligence, achievement, special abilities, and aptitudes. Concepts such as reliability, validity, and standardization. Elementary and secondary applications stressed.

EdC 541 Evaluative Methods in Guidance II (2)

Continuation of EdC 540 for both elementary and secondary counselors. Assessment of interests, values, attitudes, and personality. Further study of test selection, administration, scoring, and interpretation. Concentrates also on non-test techniques of pupil assessment.

EdC 556 Career Development Theories and Practices (2)

Theories and techniques related to career development in children, adolescents, and adults for both elementary and secondary counselors. Collection, use, and dissemination of occupational, educational, and social information stressed.

EdC 567 Group Dynamics (2)

Principles from the behavioral sciences, applied to understanding of small-group behavior as found in typical classrooms and group guidance settings. Developing competencies in group leadership. Translating educational experiences into positive decisions about self and environment.

EdC 568 The Professional Counselor in the Elementary School (2)

Role, responsibilities, and practices of the contemporary elementary guidance counselor. Development of the guidance program; relationship to curricula; position of the counselor with respect to the administration, parents, children, and teachers.

EdC 569 The Professional Counselor in the Secondary School (2)

Role, responsibilities, and practices of the contemporary secondary guidance counselor. Referral resources, parental conference techniques, relationship with administration and staff, curricula; administrative aspects of the guidance program.

EdC 571 Theories of Counseling (2)

The basic theories of counseling, with emphasis on historical and philosophical origins. Historical antecedents of each theory and evaluation of the potential of each theory as a viable approach for school counselors.

EdC 572 Counseling and Consultative Techniques in the Elementary School (2)

Practical application of the basic theories of counseling. Application of counseling and consultative techniques in simulated settings within the elementary school framework. Counselor relationships with pupils, teachers, administrators, pupil personnel staff. Community resources.

EdC 573 Counseling and Consultative Techniques in the Secondary School (2)

Practical application of the basic theories of counseling in the secondary school setting. Application of counseling and consultative techniques in simulated secondary school settings, with emphasis on the pupil, teacher, administration, parents, staff, and community resources.

EdC 574 Group Procedures in the Elementary School (2)

Emphasis is on mastering the basic theories and techniques appropriate to group procedures in the elementary school. Exposure to planning, implementing, and evaluating group activities.

EdC 575 Group Procedures in the Secondary School (2)
Mastery of theories and techniques basic to planning and implementing group activities in the secondary school. Evaluation of group activities is also stressed.

EdC 585 Contemporary Issues and Trends in Guidance (2)
Contemporary issues and current trends in school guidance. The student evaluates basic positions and integrates them into his prospective role as a school counselor.

EdC 590 Practicum in Guidance and Counseling (3)
Supervised practice guidance and counseling in an approved public school. In addition to his work under the direction of a professional counselor in a school setting, the student meets on campus with the practicum supervisor for intensive seminar activities.

Department of Elementary Education

Dr. Ziegler, Chairman
Dr. Kulp, Assistant Chairman

The department offers the Master of Education degree in elementary education, as well as non-degree programs for teachers working for permanent certification and others working for professional growth. (There is no provision in the graduate program for the student-teaching experience which is necessary for teacher certification.)

MILLER ANALOGIES TEST

Applicants for the master's degree program are required to take the Miller Analogies Test and submit scores with their initial application for admission. The application procedure will not be completed until the scores have been received.

REQUIREMENTS FOR ADMISSION TO DEGREE CANDIDACY

(See section on Degree Candidacy under Academic Information.)

1. Within the pre-candidacy period (the first 15 semester hours) the applicant must complete EdE 501 and two additional EdE courses.
2. Within the pre-candidacy period the applicant must maintain an average of 2.75 overall and 3.00 in elementary education.

Students who fail to qualify as degree candidates are classified as non-degree students. (See "Reapplication for Degree Candidacy" under Academic Information.)

THE COMPREHENSIVE EXAMINATION

This examination is given in February and July. In order to become eligible for it the student must:

1. Be a degree candidate (his application for degree candidacy having previously been approved).
2. Complete at least 28 semester hours including all required courses by the end of the semester preceding the examination.
3. Maintain an average of 2.75 overall and 3.00 in elementary education.

Applications for admission to the Comprehensive Examination are available from the Department and must be filed by December 1 for the February examination and May 1 for the July examination.

Candidates who fail the Comprehensive Examination are permitted to take one reexamination within a two-year period. Upon a second failure, candidates are automatically dropped from the degree program.

DATES FOR THE COMPREHENSIVE EXAMINATION

The examination is given on the first Saturday in February and a Saturday in July, the specific date to be announced.

REQUIREMENTS FOR THE DEGREE

1. Satisfactory completion of the curriculum as outlined below. Both the selection and the sequence of courses should be determined in consultation with the appointed adviser.
2. An overall grade point average of at least 2.75 and a grade point average of at least 3.00 in elementary education.
3. Satisfactory performance on the Comprehensive Examination.

MASTER OF EDUCATION IN ELEMENTARY EDUCATION
(30-34 Semester Hours)

			Semester Hours
I	REQUIRED COURSES		8
	EdF 500 Methods and Materials of Research in Education (Elementary)	2	
	EdF 510 Educational Foundations	3	
	EdP 550 Advanced Educational Psychology	3	
	NON-THESIS PROGRAM (34 s.h.)		
II	AREA OF CONCENTRATION (Elementary Education)		26
	Required		10
	EdE 501 Introduction to Graduate Study in Elementary Education	2	
	EdE 547 Elementary School Curriculum NOTE: See course description for prereq.	2	
	EdE 553 Child Development and Behavior II NOTE: Students who have not had a basic course in child development within the last 5 years are required to take EdE 551 before EdE 553.	3	
	EdR 510 Foundations of Reading Instruction: K-12 or EdR 511 Current Practices in Teaching Developmental Reading	3	
	Professional Electives Courses within the Department of Elementary Education and courses in elementary school subjects offered in other departments are considered to be area-of-concentration professional electives.		6-8
	Free Electives Courses not specified above and the content of which may or may not deal specifically with elementary education are considered free electives.		8-10
	THESIS PROGRAM (30 s.h.)		
	Students who wish to pursue the thesis program must consult with the department chairman after degree candidacy has been achieved and the EdF 500 course completed.		

ELECTIVES

All electives are to be chosen with the approval of the department. Students are required to consult with the adviser assigned to them. Electives may be selected from elementary education courses listed below. Other courses may be found under the departments in which they are offered. Students are advised to consult course descriptions to find courses dealing with teaching various subjects in the elementary school.

NOTE: All courses specific to elementary education are included in computing the grade point average in the area of concentration. Examples of such courses are Lit 550 and Mat 555.

OFFERINGS IN ELEMENTARY EDUCATION

EdE 501 Introduction to Graduate Study in Elementary Education (2)

For degree students in elementary education. To assess and develop skills and background for graduate study. Must be completed before applying for admission to degree candidacy.

EdE 502 Early Childhood Education Programs (2)

The application of current research to recent program developments for preschool children. PREREQ: course work and/or experience in preschool education.

EdE 505 Teaching in the Modern Elementary School (2)

Overview of elementary education in light of current trends and the changing functions and relationships of the teacher.

EdE 510-515 Workshop in Elementary Education (2-6)

Content designed to meet the needs of participants within the topic selected for the particular workshop. Topics and number of credits to be announced in advance.

EdE 522 Teaching the Communication Skills (2)

Exploration of creative methods of teaching the communication skills. Group processes, individualized instruction, and practice in integrating language arts skills with other areas. PREREQ: a recent basic course in child development.

EdE 525 Curriculum and Research in the Language Arts (2)

Review and critical analysis of research and application of findings to curriculum development and teaching strategies for the language arts.

EdE 530 Social Studies in Elementary Education (2)

A basic course in the teaching of social studies. Content, materials, and teaching strategies. For students with no recent undergraduate course in social studies.

EdE 532 Curriculum and Research in Social Studies (2)

Identification of fundamental concepts from the social science disciplines. Exploration of inquiry-conceptual teaching strategies. Recent research and implications for social studies education.

EdE 543 Creative Expression in the Elementary School (2)

Theories and techniques to promote creative thinking and enhance children's creative potential in all areas of the school curriculum.

EdE 545 The Kindergarten-Primary Program (2)

Investigation of the effects of recent research and curriculum development upon teaching strategies and classroom activities in the primary grades.

EdE 547 Elementary School Curriculum (2)

Principles underlying curriculum construction. Current trends and basic problems in the elementary curricular areas. Recommended to be taken near the end of program. PREREQ: all required courses or permission of instructor.

EdE 551 Child Development and Behavior I (3)

A basic course dealing with child development and behavior from birth to adolescence, with specific application to elementary education. Designed for students with no recent undergraduate course in child development.

EdE 553 Child Development and Behavior II (3)

Review of principles of growth and development; theories of behavior and personality development; clues to identification of children with problems; case studies of elementary school children. PREREQ: a recent basic course in child development.

EdE 554 The Child and His Self-Concept (2)

Self-concept theory and its implications for child development, learning, and behavior; specific application to teaching in the elementary school. PREREQ: course background in elementary education and child development.

EdE 560 Meeting Individual Needs of Children (2)

Discovering and meeting each child's needs; providing for individualized learning; identifying and handling special problems. PREREQ: course background in elementary education and child development.

EdE 561 Guidance in the Elementary School (3)

Developmental guidance–philosophy, programs, personnel–with emphasis on the guidance role and responsibilities of the teacher in the classroom. For elementary education majors with some teaching experience; open to others by permission of instructor. PREREQ: course background in elementary education and child development.

EdE 563 Evaluation in the Elementary School (2)
The diagnostic approach to assessing various aspects of child development and learning; both informal and formal methods of evaluation. PREREQ: course background in elementary education and child development.

EdE 565 Effective Classroom Management (2)
Planning and managing activities which facilitate classroom instruction and learning. Dynamics of interpersonal relations; appropriate tools for group and teacher evaluation. PREREQ: course background and experience in elementary education.

EdE 570 Supervision in the Elementary School (2)
Concepts and practices in supervision of teachers, student teachers, and aides in order to improve instruction in the classroom. School curricula examined to integrate application of methodology with structure. PREREQ: EdE 547 or equivalent.

EdE 590 Independent Study (1-2)
Enrollment by permission only; number of credits determined by instructor.

EdE 600 Research Report (1)

EdE 610 Thesis (3)

Department of Instructional Media Education

Dr. Weagley, Chairman

Through its Instructional Media program, the School of Education offers two curricula, one leading to the Master of Education and the other to the Educational Media Specialist Certification. It is possible to pursue both programs concurrently.

The degree program prepares the candidate for the position of audio-visual coordinator in elementary or secondary schools as well as for instructional or

administrative positions in the audio-visual field in junior colleges. The program also enables persons in business and industry to gain competence in the communications field.

THE MASTER OF EDUCATION

Students admitted to the master's degree program are required to submit scores for the Graduate Record Examination Aptitude Test and/or the Miller Analogies Test during their first session (fall, spring, or summer) of enrollment.

ADMISSION TO DEGREE CANDIDACY

Upon completion of 15 semester hours, application for degree candidacy may be made by students who meet the following requirements:

1. A 3.00 average in courses in educational media.
2. A 2.75 average in overall graduate work.
3. Successful performance on the Graduate Record Examination and/or the Miller Analogies Test.
4. Satisfactory performance on a proficiency examination in the field of educational media.

THE COMPREHENSIVE EXAMINATION

Admission to the comprehensive examination is gained by meeting the following requirements:

1. Admission to degree candidacy.
2. Completion of all required courses and 28 semester hours of course work.

DEGREE REQUIREMENT

The candidate must perform satisfactorily on the comprehensive examination and satisfactorily complete the curriculum shown below.

MASTER OF EDUCATION IN EDUCATIONAL MEDIA
(Non-Thesis Program—34 Semester Hours)

			Semester Hours
I	REQUIRED COURSES		5
	EdF 500 Methods and Materials of Research in Education	2	
	EdF 510 Educational Foundations	3	
II	AREA OF CONCENTRATION		24-29
	A. Required Courses	20	
	EdM 502 Selection and Effective Utilization of Educational Media	2	

	EdM 511 Programmed Instruction	3	
	EdM 519 Library Science	2	
	EdM 520 Designing Instructional Materials	3	
	EdM 522 Production of Non-Projected and Projected Materials	3	
	EdM 555 Learning Theories Related to Educational Media	2	
	EdM 560 Organization and Administration of the Audio-Visual Program	3	
	EdM 590 Internship Program in Educational Media	2	
B.	Electives, chosen under advisement from the following:		4-9
	EdM 501 Orientation to Educational Media	3	
	EdM 505 The Motion Picture in Education	2	
	EdM 508 Audio-Visual Materials in the Elementary School Curriculum	2	
	EdM 509 Audio-Visual Materials in the Secondary School	2	
	EdM 513 Producing Auto-Instructional Programs	3	
	EdM 524 Advanced Projectual Production	3	
	EdM 525 Photography for Teachers	3	
	EdM 526 Advanced Still Photography	3	
	EdM 529 Instructional Use of the 8 mm. Motion Picture Camera	3	
	EdM 530 Cinematography I	3	
	EdM 531 Cinematography II	3	
	EdM 533 Television in Education for Teachers	3	
	EdM 534 Instructional Television Production I	3	
	EdM 535 Instructional Television Production II	3	
	EdM 552 History and Philosophy of Educational Media	2	
	EdM 563 Field Study in Educational Media	3	
	EdM 565 Seminar in Educational Media	2	
	EdM 591 Seminar in Research in Communications	2	
	EdM 600 Research Report	2	
III	FREE ELECTIVES (under advisement)		0-5

EDUCATIONAL MEDIA SPECIALIST CERTIFICATION

In order to obtain this certificate, the student must:

A. Hold a Pennsylvania teaching certificate valid for elementary or secondary education.

B. Complete, under advisement, the State-approved curriculum, which consists of the course work outlined under II. Area of Concentration in the Master of Education in Educational Media program, given above.

C. Achieve an average of 2.75 in the prescribed program.

D. Perform successfully on a final comprehensive examination.

OFFERINGS IN INSTRUCTIONAL MEDIA EDUCATION

EdM 501 Orientation to Educational Media (3)

Survey of modern educational media with opportunities for laboratory activities.

EdM 501 or its equivalent is prerequisite to all of the EdM (Educational Media) courses which follow.

EdM 502 Selection and Effective Utilization of Educational Media (2)

Evaluates diverse types of educational media and explores means of integrating these media into the instructional situation.

EdM 505 The Motion Picture in Education (2)

History and development of the motion picture, with emphasis on educational motion pictures. Cinematographic techniques; the impact of 35 mm., 16 mm., and 8 mm.; the single-concept instructional film. An evaluation of diverse types of films as they apply to types of learning.

EdM 508 Instructional Materials in the Elementary School Curriculum (2)

Practice in techniques of using and evaluating communications media in the classroom. Correlating audio-visual materials and techniques with the elementary program.

EdM 509 Instructional Materials in the Secondary School (2)

Using instructional materials in the secondary school; their expanding role; prospects for their contribution to organizational, philosophical, and pedagogical changes in the future.

EdM 511 Programmed Instruction (3)

Program writing is stressed in this workshop-type course covering the history and psychology of programmed instruction. Trends in programmed instruction; program evaluation; programming techniques. PREREQ: general psychology.

EdM 513 Producing Auto-Instructional Programs (3)

Techniques in the production of slide-tape presentations, audio-tape presentations, 8 mm. magnetic sound film lessons, and other self-teaching sequences. PREREQ: EdM 511, 525.

EdM 519 Library Science (2)

Organization and administration of libraries, with emphasis on instructional materials. Selecting, cataloguing, and evaluating instructional materials.

EdM 520 Designing Instructional Materials (3)

Techniques of lettering and design for display and projection materials.

EdM 522 Production of Non-Projected and Projected Materials (3)

Basic local production techniques including copying, duplicating, mounting, displaying, and evaluating graphics and flat pictures. Investigates techniques for designing and locally producing projectuals; evaluates commercial techniques of transparency production. PREREQ: EdM 520.

EdM 524 Advanced Projectual Production (3)

Design and production of projectuals using technamation, color imbibition, photocopy, and advanced diazo techniques. Investigation of commercial production of transparencies. PREREQ: EdM 522.

EdM 525 Photography for Teachers (3)

A basic laboratory course in the taking and processing of still pictures.

EdM 526 Advanced Still Photography (3)

Lecture and laboratory experiences in the use of large-format cameras. PREREQ: EdM 525.

EdM 529 Instructional Use of the 8 mm. Motion Picture Camera (3)

Prepares teachers to produce and/or guide students in the production of 8 mm. films.

EdM 530 Cinematography I (3)

Scripting and shooting 16 mm. motion pictures.

EdM 531 Cinematography II (3)

Editing and sound recording on 16 mm. films. PREREQ: EdM 530.

EdM 533 Television in Education (3)

Development of educational television and the instructional use of commercial, educational, and closed-circuit television in the classroom.

EdM 534 Instructional Television Production I (3)

Planning, writing, producing, and evaluating instructional television productions. PREREQ: EdM 533.

EdM 535 Instructional Television Production II (3)

Production of telecasts in selected subject areas with emphasis on videotape recording. PREREQ: EdM 534.

EdM 552 History and Philosophy of Educational Media (2)

Historical development of audio-visual instruction. Philosophy underlying the combined use of sight and sound in the teaching-learning process.

EdM 555 Learning Theories Related to Educational Media (2)

The role of perception in sensory experience; inner cognitive processes in relation to maturation, goals and drives, types of learning, and environment. Psychological processes are related to the learning resources provided by educational media.

EdM 560 Organization and Administration of the Educational Media Program (3)
The function of the school's educational media program; selection and evaluation of materials and equipment; unit costs; problems of developing and maintaining an efficient operation. PREREQ: 12 graduate credits in educational media.

EdM 563 Field Study in Educational Media (3)
A scheduled group or individual tour, foreign or domestic, in which students investigate notable installations or projects in educational media.

EdM 565 Seminar in Educational Media (2)
Explores current problems in the use of instructional media. PREREQ: 12 graduate credits in educational media.

EdM 590 Internship Program in Educational Media (2)
Practicum in supervising and implementing instructional services. PREREQ: 18 credits in educational media.

EdM 591 Seminar in Research in Communications (2)
Basic elements of communication theory, applied to audio-visual education. Research in audio-visual communication is analyzed. PREREQ: 18 credits in educational media.

EdM 600 Research Report (2)

Department of Secondary Education and Professional Studies

Dr. Mississyan, Chairman

The Department of Secondary Education and Professional Studies is responsible for the professional courses offered for certification on the secondary level and in the Master of Education degree programs having academic concentrations.

This department also offers other professional course work required in all M.Ed. programs and some courses designed for election by educators and others who wish to develop new insights and/or to strengthen professional skills.

MASTER OF EDUCATION
(Secondary Education—Academic Subject Majors)

The Master of Education program is offered with academic concentrations in English, French, Spanish, German, Latin, biology, chemistry, earth and space science, mathematics, physical science, geography, and social science (with emphasis in history, political science, psychology, or sociology-anthropology). This program is offered cooperatively by the School of Education and the Schools of Arts and Letters, Sciences and Mathematics, and Social and Behavioral Sciences. The academic requirements for each concentration are found elsewhere in this Bulletin under the respective department.

This degree affords the student opportunity to strengthen his knowledge in his major subject-matter field, as well as his professional knowledge and competence.

The student earning the degree in this program must be advised both by the department of his subject field and by the Department of Secondary Education and Professional Studies. It is the responsibility of the student to arrange for conferences in both departments in planning his program.

MASTER OF EDUCATION REQUIREMENTS
(Secondary Education—Academic Subject Majors)
(34 Semester Hours)

		Semester Hours
1	PROFESSIONAL EDUCATION REQUIREMENTS*	10-12
	A. EdF 510 Educational Foundations (3)	
	B. A minimum of one course from each of the following groups:	
	Group 1	
	EdF 520 Comparative Education (3)	
	EdF 521 Contemporary British Education (3)	
	EdF 523 Education Behind the Iron Curtain (3)	
	EdF 580 History of American Education (3)	
	EdF 581 Philosophy of Education (3)	

* Chosen in conference with the adviser in secondary education, according to the needs of the student.

Group 2
EdF 503 The Emerging Curriculum (3)
EdF 509 Contemporary Teaching Trends (2)
EdP 550 Advanced Educational Psychology (3)
EdP 560 Behavior Modification (3)
EdS 524 Supervision of Student Teaching (3)
EdS 569 Adolescent Development and Learning (3)
EdU 502 Human Relations in the School and Community (3)

Group 3
EdC 567 Group Dynamics (2)
EdF 504 Middle School Workshop (4)
EdF 505 Individually Prescribed Instruction Workshop (3)
EdF 515 Federal and State Role in Education (2)
EdF 570 The Community/Junior College (3)
EdF 590 School Law (3)
EdS 502 Secondary School Curriculum (2)
EdS 506 The Junior High School (2)
EdU 501 Curricular Adaptations for the Disadvantaged (3)

II SUBECT MATTER CONCENTRATION 20-22
A. Methods and Materials of Research (2-3)
B. Academic Subject (18-20)
(See respective academic department for details)

III ELECTIVE (Professional or Academic)* 0-4

COMPREHENSIVE EXAMINATIONS

The student must perform satisfactorily on the final comprehensive examinations covering the subject-matter concentration and the professional-education requirements.

OFFERINGS IN SECONDARY EDUCATION AND PROFESSIONAL STUDIES

FOUNDATIONS

EdF 500 Methods and Materials of Research in Education (2)
Historical, descriptive, and experimental methods of research. Methods for locating, evaluating, interpreting, and reporting research data. Each student prepares a research prospectus.

EdF 503 The Emerging Curriculum (3)
Curriculum trends, beginning in 1951, for grades kindergarten through 12 by means of three comprehensive topics: (1) the curriculum reform movement, (2) emerging curriculum theory and practice, and (3) the educational reform movement.

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* Chosen in conferences with the secondary education and academic advisers, according to the needs of the student.

EdF 504 Middle School Workshop (4)

Philosophy, administration, curriculum, staff, and facilities necessary for the most efficient educational experience in the intermediate levels of school. *Summers, on demand.*

EdF 505 Individually Prescribed Instruction Workshop (3)

Individually prescribed instructional techniques as applied in the classroom and intensive learning centers. Techniques of academic diagnosis, prescription production, and electronic learning. Students will have an opportunity to work directly with hardware and software components of an intensive learning center.

EdF 509 Contemporary Teaching Trends (2)

Team teaching, programmed instruction, and various media of communication in the elementary and secondary schools are evaluated. Effective adaptation to newer practices is emphasized.

EdF 510 Educational Foundations (3)

History of education, integrated with educational philosophy and thought; the long evolution of educational theory and issues.

EdF 515 Federal and State Role in Education (2)

The past, current, and future role of the federal and state governments in education in the United States. Emphasis on the applications to the Commonwealth of Pennsylvania. Impact of federal legislation since 1958.

EdF 520 Comparative Education (3)

Major problems of education in a number of other countries are related to similar problems in the United States. Contrasting purposes and philosophies and differences in organization and administration are analyzed.

EdF 521 Contemporary British Education (3)

Consideration of the philosophy of British education today and the ways it has changed in past years. Present-day curricula and administrative structure of the various types of British schools are explored.

EdF 523 Education Behind the Iron Curtain (3)

Educational structure in the Soviet Union, past, present, and future. Khrushchev's educational reforms and the return to the ten-year school. Educational structure in certain Eastern European countries also included.

EdF 570 The Community/Junior College (3)

An analysis of the programs, problems, and students of a two-year college. Emphasis on the development, special philosophies, and current issues relating to the community or junior college. Designed for students preparing to be teachers and/or administrators in these colleges.

EdF 580 History of American Education (3)

Nature and direction of American education, studied through individual and group research.

EdF 581 Philosophy of Education (3)

Selected philosophies and their influence on educational principles and practices in a democratic social order.

EdF 590 School Law (3)

The legal structure for educational organization on state, intermediate, and local levels. Legal status of the board of education; legal responsibilities of the teacher; legal responsibilities between the board of education and the student.

EDUCATIONAL PSYCHOLOGY

EdP 550 Advanced Educational Psychology (3)

Processes by which skills, understanding, concepts, and ideals are acquired; teaching practices in relation to basic research concerning learning; similarities and differences in theories of learning. PREREQ: a course in educational psychology, EdF 500.

EdP 560 Behavior Modification (3)

Study and implementation of principles of classical and operant conditioning to the modification of student behavior in residential and educational settings. Emphasis is given to such areas as classroom discipline, student values, and student study habits.

SECONDARY EDUCATION

EdS 502 Secondary School Curriculum (2)

Current practices and trends in reorganizing the secondary school curriculum in the major academic areas. The various integrating techniques. Curriculum development.

EdS 506 The Junior High School (2)

Development and function of the junior high school; philosophy underlying its development. Curriculum, teaching assignments, characteristics of pupils, and special problems. PREREQ: a course in adolescent development.

EdS 524 Supervision of Student Teaching (3)

Designed for teachers who cooperate or expect to cooperate in West Chester's student teaching program. Basic principles, practices, materials, and resources for an effective student teaching program. PREREQ: certification for teaching.

EdS 569 Adolescent Development and Learning (3)

Mental, physical, emotional, and social development and behavior of the adolescent with emphasis on various types of learning. Case studies are used.

Reading

Dr. Gelfand, Coordinator

Through its Graduate Reading program, the School of Education offers: (1) the Master of Education degree with a major in reading and (2) Reading Specialist Certification. Students who complete either program are recommended for Pennsylvania Certification as Reading Specialists.

These programs prepare candidates to serve in special reading positions and as classroom teachers of reading in elementary or secondary schools.

MASTER'S DEGREE PROGRAM

ADMISSION TO DEGREE PROGRAM

1. The student must possess an Instructional I Certificate.
2. The Graduate Record Examination Aptitude Test and/or the Miller Analogies Test is required. Scores must be on file within the student's first semester or session (fall, spring, or summer) of enrollment.
3. Courses required within the pre-candidacy period are: EdR 510–Foundations of Reading Instruction, EdR 511–Current Practices in Teaching Developmental Reading, EdR 516–Reading Disabilities, EdF 500–Methods and Materials of Research in Education.
4. An overall grade average of 2.75 and a minimum of 3.00 in reading courses must be maintained by the applicant during the pre-candidacy period.

THE COMPREHENSIVE EXAMINATION

Upon completion of the prescribed work and the recommendation of the adviser, the student is eligible for the comprehensive examination. The examination is given the first Saturday in December and the second Saturday in July.

Applications for admission to the comprehensive examination are available from the coordinator of the Graduate Reading program and must be filed by October 1 for the December examination and May 1 for the July examination.

Candidates who fail the comprehensive examination are permitted one reexamination within a two-year period. Upon a second failure, candidates are automatically dropped from the degree program.

REQUIREMENTS FOR THE DEGREE

1. Satisfactory completion of the curriculum outlined below and any additional courses which may be required by the faculty of the Reading program.
2. An overall grade average of at least 2.75 and a grade average of at least 3.00 in reading courses.
3. Completion of the residency requirement of the College.
4. Satisfactory performance on the comprehensive examination in reading.

STUDENT RESPONSIBILITY

Responsibility for seeing that all requirements of the program are met at the proper time rests with the student.

READING SPECIALIST CERTIFICATION

REQUIREMENTS FOR THE READING SPECIALIST CERTIFICATION PROGRAM

1. The student must possess an Instructional I Certificate.
2. The Graduate Record Examination Aptitude Test and/or the Miller Analogies Test is required for admission. Scores must be on file within the student's first semester or session (fall, spring, or summer) of enrollment.
3. Courses required within the first 15 hours are: EdR 510–Foundations of Reading Instruction, EdR 511–Current Practices in Teaching Developmental Reading, EdR 516–Reading Disabilities, EdR 514–Reading in the Content Areas: Elementary or EdR 515–Reading in the Content Areas: Secondary.
4. An overall grade average of 2.75 and a minimum of 3.00 in reading courses must be maintained by the student.
5. In order to obtain the certificate, the student must complete the required courses listed under II–Area of Concentration and III–Related Study, as shown in the degree program below.
6. The student must perform successfully on the comprehensive examination.

MASTER OF EDUCATION IN READING

		Semester Hours	
I	REQUIRED PROFESSIONAL EDUCATION COURSES		5
	EdF 500 Methods and Materials of Research in Education	2	
	EdF 510 Foundations of Education	3	
II	AREA OF CONCENTRATION		24-27
	Group A–Required Courses	21	

EdR 510	Foundations of Reading Instruction: K-12	3	
EdR 511	Current Practices in Teaching Developmental Reading	3	
EdR 514	Reading in the Content Areas: Elementary		
	or	3	
EdR 515	Reading in the Content Areas: Secondary		
EdR 516	Reading Disabilities	3	
EdR 521	Reading Clinic Practicum and Seminar I	3	
EdR 522	Reading Clinic Practicum and Seminar II	3	
EdR 541	Organization and Operation of Reading Programs: K-12	3	
Group B–Elective Courses (selected under advisement)			3-6
EdR 525	Reading for the Disadvantaged	3	
EdR 540	Seminar in Reading	3	
EdR 542	Seminar in Reading Research	3	
EdR 590	Independent Study and Research	1-6	
III	RELATED STUDY (Chosen from Group A and Group B under advisement)		5-7
Group A–Language Arts			2-3
EdE 522	Teaching the Communication Skills	2	
EdE 525	Curriculum and Research in the Language Arts	2	
EdE 543	Creative Expression in the Elementary School	2	
Eng 502	History of the English Language	3	
Lit 550	Literature for the Elementary School	3	
Lit 551	Literature for the Secondary School	3	
Lit 690	Seminar in English Literature	3	
Sph 525	Communication in the Classroom: Models and Approaches	3	
Group B–Related Areas			3-4
EdA 571	Childhood Learning Disabilities	2	
EdC 540	Evaluative Methods in Guidance I	2	
EdC 541	Evaluative Methods in Guidance II	2	
EdE 547	Elementary School Curriculum	2	
EdE 551	Child Development and Behavior I	3	
EdE 553	Child Development and Behavior II	3	
EdU 501	Curricular Adaptations for the Disadvantaged	3	

OFFERINGS IN READING

EdR 510 Foundations of Reading Instruction: K-12 (3)

Psychology and pedagogy of reading instruction and their relation to the reading-thinking process. The nature of the reading process; the nature of the learner; learning theories.

EdR 511 Current Practices in Teaching Developmental Reading (3)
Theoretical basis underlying developmental reading. Application of informal assessments, classroom organization, instructional materials, and teaching techniques.

EdR 514 Reading in the Content Areas: Elementary (3)
The specialized reading skills, reading problems, teaching techniques, and reading activities in content subjects in the elementary grade. PREREQ: EdR 510.

EdR 515 Reading in the Content Areas: Secondary (3)
The specialized reading skills, reading problems, teaching techniques, and reading activities in content subjects at the secondary level. PREREQ: EdR 510.

EdR 516 Reading Disabilities (3)
Lecture and demonstration, concerned with the nature of reading disabilities and diagnosis and remediation of reading problems. PREREQ: EdR 510.

EdR 521 Reading Clinic Practicum and Seminar I (3)
A laboratory course. Diagnosis of elementary and secondary children with reading difficulties. Major attention given to diagnosing corrective cases and writing case reports. PREREQ: EdR 516.

EdR 522 Reading Clinic Practicum and Seminar II (3)
Continuation of EdR 521. Opportunities to develop specific techniques for correcting various types of reading disability cases. PREREQ: EdR 521.

EdR 525 Reading for the Disadvantaged (3)
Historical, cultural, and biological contexts of current issues as they relate to language competency programs, evaluation, and funding for disadvantaged learners. PREREQ: EdR 510 or adviser's approval.

EdR 540 Seminar in Reading (3)
Critical examination of current trends and research as they relate to the teaching of reading. PREREQ: EdR 522 or adviser's approval.

EdR 541 Organization and Operation of Reading Programs: K-12 (3)
Practical application of the reading specialist's role in organizing and operating K-12 reading programs. Emphasis on the use of the total school community in meeting individual reading needs. PREREQ: EdR 522 or adviser's approval.

EdR 542 Seminar in Reading Research (3)
A seminar in the basic techniques and sources of research in reading. Exposure to significant research in the field. PREREQ: EdR 521 or permission of instructor.

EdR 590 Independent Study and Research (1-6)
Individual investigation and exploration of related reading research. Topic must be approved by the supervising instructor prior to registration.

Educational Research

Dr. Peters, Coordinator

The School of Education, in cooperation with the Bureau of Research and Related Services, offers a degree program leading to the Master of Science in educational research. The degree is primarily for individuals who wish to obtain research positions in local school districts. It is also appropriate for research positions in colleges and universities, community colleges, governmental agencies, regional educational laboratories, and industry.

ADMISSION TO DEGREE PROGRAM

The applicant will be admitted to the program on the basis of:

1. A minimum over-all average of 2.75 in undergraduate studies and 3.00 in the major field.
2. Graduate Record Examination Aptitude Test.
3. Personal interview with the coordinator of the program.

Any candidate admitted to graduate study, but not admitted to the degree program in educational research, may take courses with permission of the coordinator. There is no guarantee that courses taken by a non-degree student may later be used to satisfy degree requirements for the M.S. in educational research.

REQUIREMENTS FOR ADMISSION TO DEGREE CANDIDACY

Upon completion of 10 semester hours, which must include Psy 501–Introductory Statistics for the Behavioral Sciences and EdF 500–Methods and Materials of Research in Education, the candidate will be advanced to degree candidacy providing he has maintained a minimum average of 3.00 in his graduate work and has passed a qualifying examination.

THE INTERNSHIP

After mastery of the tool courses (Psy 501, EdF 500, Psy 502, and Res 520), the student will serve an internship with an outside agency conducting educational research. During this period he will utilize the skills he has developed to design and conduct a research project under the joint supervision of College and host institution personnel.

THE COMPREHENSIVE EXAMINATION

To be eligible for the comprehensive examination the candidate must:

1. Have completed at least 28 semester hours and all tool courses prior to the semester in which he takes the examination.
2. Have maintained an overall average of at least 3.00.

The candidate must indicate by letter his intention to take the examination. The coordinator should receive this letter within the first 10 days of the semester in which the candidate desires the examination.

Candidates who fail the comprehensive examination are permitted one re-examination after an interval of at least one year but not more than two years.

REQUIREMENTS FOR THE DEGREE

1. Satisfactory completion of the curriculum outlined below.
2. An overall average of 3.00 in graduate courses taken in the degree program.
3. Satisfactory performance on the comprehensive examination.
4. Completion of Research Report or Master's Thesis approved by the coordinator.

MASTER OF SCIENCE IN EDUCATIONAL RESEARCH
(34 Semester Hours)

		Semester Hours
REQUIRED COURSES		
Psy 501 Introductory Statistics for the Behavioral Sciences		2
EdF 500 Methods and Materials of Research in Education		2
Psy 502 Advanced Statistics for the Behavioral Sciences		2
Res 520 Research Design		2
EdC 540 Evaluative Methods in Guidance I		2
CSc 501 Introduction to Computer Programming		3
EdF 503 The Emerging Curriculum		3
EdF 510 Educational Foundations		3
EdF 515 Federal and State Role in Education		2
EdP 550 Advanced Educational Psychology		3
Res 592 Internship Program in Educational Research		2
Research Project		2-3
Res 600 Research Report	2	
or		
Res 610 Thesis	3	
Electives (to be chosen under advisement)		5-6

ELECTIVES

Electives may be chosen from the offerings of any department, with the approval of the department involved and of the coordinator.

OFFERINGS IN EDUCATIONAL RESEARCH

Res 520 Research Design (2)
Principles for the efficient design of experiments and other types of observational programs. Sampling techniques, methods of analysis, and threats to valid inference. PREREQ: Psy 501.

Res 530 Seminar in Non-Parametric Statistics (1)
Selection and use of non-parametric tests for significance. Appropriate non-parametric tests for specific research designs are studied. One sample design and designs of two or more samples both independent and related are discussed. PREREQ: Psy 501.

Res 590 Independent Study in Educational Research (1-3)
Research project, reports, and readings in educational research. PREREQ: coordinator's approval.

Res 592 Internship Program in Educational Research (2)
Opportunity for prospective educational researchers to design, conduct, and analyze a study and to prepare a report of the research. The internship is served in local educational agencies, county offices, federal project centers, the Pennsylvania Department of Education, or other research environments. The intern is supervised by both host and College personnel.

Res 600 Research Report (2)

Res 610 Thesis (3)

Special Education

Dr. Freeman, Coordinator

OFFERINGS IN SPECIAL EDUCATION

EdA 540 Workshop in Special Education (4)
An intensive program of observation and instruction of mentally retarded or physically handicapped children. Instructional experience with an atypical child is combined with lecture, demonstration, and case study. Primarily for in-service teachers. PREREQ: permission of instructor.

EdA 570 The Mentally Atypical Child (2)

A study of the mentally superior child and the mentally retarded child. PREREQ: general psychology and educational psychology.

EdA 571 Childhood Learning Disabilities (2)

The study and education of the child with perceptual problems and/or minimal brain damage. PREREQ: a course or courses in the psychology of exceptional children.

EdA 572 The Emotionally Disturbed Child (2)

The causes, symptoms, and therapeutic approaches in the field of emotional disturbance. Opportunity for associating with mental health professionals who staff intervention programs.

EdA 573 Developmental Assessment of Children with Learning Problems (3)

Diagnostic procedures and subsequent educational prescriptions useful with children experiencing learning difficulties.

EdA 574 Behavior Management in the Classroom (3)

Etiology and implications of behavioral problems in educational settings. Introduction to approaches aimed at producing change.

Urban Education

Mr. Leeds, Coordinator

OFFERINGS IN URBAN EDUCATION

EdU 501 Curricular Adaptations for the Disadvantaged (3)

Curricular innovations which attempt to aid the culturally disadvantaged in developing skills necessary for maximal personal adjustment to society. Survey of urban problems and their relationships to inner-city schools.

EdU 502 Human Relations in the School and Community (3)

Intensive study of the inner-city community and its close relationship with the school society. Analysis of prejudice and its implications to community and school power structures.

School of Health and Physical Education

Edwin L. Youmans, *Dean*
Edwin B. Cottrell, *Associate Dean*
Edward N. Norris, *Associate Dean for Graduate Studies*

PROFESSORS
Norman A. Cochran, B.S., M.A., Ed.D.
Edwin B. Cottrell, B.S., M.Ed., Ed.D.
John D. Lemcke, B.S., M.Ed., Ed.D.
Edward N. Norris, B.S., M.S., Ed.D.
Neil A. Serpico, B.A., Ed.M., Ed.D.
Russell L. Sturzebecker, B.S., Ed.M., Ed.D.
Edwin L. Youmans, B.A., M.A., Ph.D.

ASSOCIATE PROFESSORS
Alvin B. Davis, B.S., M.A.
John L. DeMillion, Jr., B.S., M.Ed.
Phillip B. Donley, B.S., M.S., Certificate in Physical Therapy
Walter E. Funk, B.S., M.Ed.
Ralph H. Kapilian, B.S., M.S., Ph.D.
Monita Lank, B.A., M.A., Ph.D.
Melvin M. Lorback, B.S., M.S.
John M. Lowe, Jr., B.S., M.S., Ed.D.
John R. Steinmetz, B.S., M.Ed.
Lloyd C. Wilkinson, B.S., M.A.
Richard B. Yoder, B.S., M.A.

The School of Health and Physical Education offers degree programs leading to the Master of Education and Master of Science in health and physical education. The Master of Education enriches academic preparation for teaching in the public schools and prepares the successful candidate for teaching at the college level. The Master of Science is designed primarily to meet the individual needs of the graduate student who wishes to pursue graduate work beyond the master's degree and leading to the doctoral degree. The M.S. degree also prepares personnel to serve as staff in institutions of education, government, and industry.

Communicating with the School

Communications regarding the graduate program in health and physical education should be addressed to the Associate Dean for Graduate Studies, School of Health and Physical Education, West Chester State College, West Chester, Pa. 19380.

THE MASTER OF EDUCATION PROGRAM

Admission to the M.Ed. Program

In addition to meeting the basic requirements of the College, given under Admissions, applicants must present a baccalaureate degree attained in the field of health and physical education.

Admission to M.Ed. Degree Candidacy

Within the 15 semester hours of pre-candidacy, the applicant must complete four of the following five required courses: PEd 500, 530, 550, 561, and HEd 540. His minimum grade-point average for these courses must be 2.75.

Requirements for the M.Ed. Degree

1. Satisfactory completion of the curriculum shown below, with an overall average of 2.75 and an average of 3.00 in health and physical education.
2. Satisfactory performance on the written and/or oral comprehensive examinations.

THE MASTER OF SCIENCE PROGRAM

Admission to the M.S. Program

Applicants must meet the basic requirements of the College, given under Admissions, and must present a baccalaureate degree attained in the field of health and physical education. They must also achieve a combined score of 800 on the Aptitude Section of the Graduate Record Examination.

In addition, at the discretion of the graduate faculty of the School, a screening examination may be required of M.S. candidates.

Admission to M.S. Degree Candidacy

Within the 15 semester hours of the pre-candidacy period, the applicant is expected to complete three of the following four required courses: PEd 500, 530, 550, and PEd 561. His grade-point average for these and other courses taken during pre-candidacy must be at least 3.00.

Requirements for the M.S. Degree

1. Satisfactory completion of the curriculum shown below, with an overall average of 3.00.
2. Oral defense of the thesis.
3. Satisfactory performance on the written and/or oral comprehensive examinations.

MASTER OF EDUCATION IN HEALTH AND PHYSICAL EDUCATION
(34 Semester Hours)

		Semester Hours	
AREA I			20
A.	Basic Required		
EdF 510	Educational Foundations	3	
PEd 500	Methods and Materials of Research in Health and Physical Education	2	
PEd 530	Scientific Bases for Physical Education	3	
PEd 550	Historical and Philosophical Bases for Health and Physical Education	3	
PEd 561	Techniques of Measurement and Evaluation in Health and Physical Education	3	
HEd 540	School Health Problems	3	
B.	Research Project		
PEd 591	Research Project Seminar I	2	
PEd 592	Research Project Seminar II	1	
AREA II			6
Selected Required (only one of the two HEd courses may be selected)			
PEd 562	Administration and Supervisory Practices in Health, Physical Education, Recreation, and Athletics	3	
PEd 570	Curriculum in Health and Physical Education	3	
HEd 565	Scientific Bases for Health	3	
	or		
HEd 567	Sociological Bases for Health	3	
AREA III			8
Electives, chosen under advisement.			

MASTER OF SCIENCE IN HEALTH AND PHYSICAL EDUCATION
(30 Semester Hours)

		Semester Hours	
1	AREA OF CONCENTRATION		11
PEd 500	Methods and Materials of Research in Health and Physical Education	2	
PEd 530	Scientific Bases for Physical Education	3	
PEd 550	Historical and Philosophical Bases for Health and Physical Education	3	
PEd 561	Techniques of Measurement and Evaluation in Health and Physical Education	3	

II	THESIS		6
	PEd 593 Seminar	2	
	PEd 610 Thesis	4	
III	ELECTIVES		13
	A. Electives concentrated in either the scientific area or the social and cultural areas, selected under advisement	7-10	
	B. Electives in related areas, selected under advisement	3-6	

OFFERINGS IN HEALTH AND PHYSICAL EDUCATION

Health Education

Symbol: HEd

500 Family Life and Sex Education: Workshop (3)

Objectives, content, methodology, and evaluation of family life and sex education programs. For prospective and in-service elementary and secondary teachers, nurses, and community leaders who work professionally with children and youth. Guest speakers and resource persons; films and other instructional materials.

540 School Health Problems (3)

In-service training in school health problems, using the case technique method and a variety of materials, methods, and resources.

565 Scientific Bases for Health (3)

Past and recent scientific developments in selected physiological health problems. Analysis of research findings which contribute to basic content in health education. The practical application of these findings through health behavior.

567 Sociological Bases for Health (3)

Past and recent scientific developments in selected sociological health problems. Analysis of research findings in the areas of social and mental health; the place of these findings in the basic content in health education and their practical application through group behavior.

569 Addictive Diseases (3)

Designed to assist the student and in-service teacher in developing knowledge and insight into the addictive diseases (alcohol, drugs, tobacco). Utilization of resource personnel.

Physical Education
Symbol: PEd

500 Methods and Materials of Research in Health and Physical Education (2)

Techniques of research in education applied to the field of health, physical education, and recreation.

502 Elementary Physical Education Workshop (2)

Orientation for the teaching of elementary physical education. Principles and practices; appropriate activities for various grade levels.

510 School and Community Recreation (3)

Community recreation with emphasis on the role of the school in the total program.

512 Outdoor Education Workshop (2)

Principles, procedures, and skills for conducting outdoor education programs. Seminars, lectures, field trips, and practical participation in outdoor education skills.

520 Scientific Principles of Coaching (3)

Recent trends in theories and techniques of teaching sports. Mechanical principles of efficient movement. Research related to competitive performance. Specialists serve as guest panelists.

530 Scientific Bases for Physical Education (3)

Scientific data related to physical education activities. Scientific approaches to motor learning and development of skill. PREREQ: anatomy, physiology, applied physiology, or equivalents.

531 Adapted Physical Education (3)

Techniques for a program of adapted physical education in the public school. Application of activities to benefit the child with a temporary or permanent disability.

534 Modern Principles of Athletic Training (3)

A course for the physical educator and/or coach. Injuries which occur in class, practice, and game situations; preventive taping and wrapping; immediate first-aid procedures; professional relations with the medical profession.

550 Historical and Philosophical Bases for Health and Physical Education (3)

Past and contemporary philosophies, principles, and objectives in health, physical education, and recreation; current trends.

551 Seminar in Professional Literature in Health, Physical Education, and Recreation (3)

Review of current professional literature in the area and its related fields. Emphasis on the application of the literature to teaching and research.

560 Contemporary Problems in Health, Physical Education, and Recreation (3)

Problems in teaching health, physical education, and recreation; in-service aspects; factors and variables which influence solutions of these problems.

561 Techniques of Measurement and Evaluation in Health and Physical Education (3)

Statistical and evaluative procedures and their application to health, physical education, and recreation.

562 Administration and Supervisory Practices in Health, Physical Education, Recreation, and Athletics (3)

Nature of the positions of directors or supervisors of physical education, recreation, and athletics. Job specifications; operational principles and procedures.

563 Scientific Measurement and Instrumentation (2)

Experience in measurement involving operation of laboratory equipment for research in physical education.

564 Biodynamics of Human Performance (3)

Physiology of the active, vital organism. Scientific findings concerning human performance, especially under stress and accompanying physiological adjustments.

566 Mechanical Analysis of Motor Skills (3)

Fundamental principles of mechanics, applied to teaching physical education and athletic activities.

570 Curriculum in Health and Physical Education (3)

Trends in health and physical education curricula at the elementary, secondary, and college levels. Surveys, reports, and analyses of curriculum practices.

571 Comparative Physical Education (3)

Comparative study of programs outside the United States. Current philosophies, principles, and practices.

572 The Child and Physical Education (3)

Contributions of physical education to the child's physical, social, emotional, and intellectual growth and to his developmental needs and interests. The influences of various activities on growth and development.

573 The Olympic Games—Their Influences on the Ancient and Contemporary Worlds (2)

Ancient and modern games and their historical and cultural significance. Sociological and political implications of the modern games.

580 History and Philosophy of Safety Education and Principles of Accident Prevention (3)

The safety movement in the United States and other countries. Place of safety education in modern living; philosophies of safety-education leaders; accident causation and prevention; their research implications. Background for administering school, civil defense, and emergency safety programs.

581 Contemporary Practices and Program Evaluation in Safety Education (3)

Current practices, evaluation of programs, and research of current literature in safety education. Techniques for selecting, constructing, and utilizing instruments for evaluating safety-education programs. Problem-solving projects.

582 Problems in Traffic and Driver Education (3)

Contemporary curriculum and current practices in driver and traffic education, enforcement of traffic laws and regulations, engineering problems. Problem-solving projects.

583 Psychology in Safety Education and Accident Prevention (3)

Effects of unconscious determinism, habits, attitudes, individual adjustment, motivation, and personality on accident causation. Research implications explored.

587 Seminar in the Four-Phase Program of Driver Education (3)

In-service experience for driver-education teachers in classroom, BTW, Multi-Car Method, and Simulation.

591 Research Project Seminar I (2)

The M.Ed. candidate selects a problem for a Research Report, reviews the literature, develops procedures, and collects appropriate data. He is expected to complete the first three chapters of his Research Report during Seminar I, and will continue to register for this course each semester or summer session until this requirement is met. He then registers for Seminar II.

592 Research Project Seminar II (1)

The M.Ed. candidate is expected to complete his Research Report in this seminar (see PEd 591). He continues to register for the seminar until the Report is completed.

593 Thesis Seminar (2)

A course for the M.S. candidate, who selects a topic, reviews the literature, develops procedures, and prepares a proposal acceptable to his thesis committee. The candidate continues to register for the seminar until he has met its requirements. He then registers for PEd 610.

600 Independent Study and Special Projects (1-3)

Research projects, seminar papers, reports of special conferences, and readings in health and physical education. PREREQ: approval of Associate Dean for Graduate Studies.

610 Thesis (4)

Undertaken upon completion of PEd 593. If the thesis is not completed in the first semester the student must register again and thereafter in 593 until his committee accepts his thesis.

SERVICE COURSES

The following courses are open to all curricula, with no prerequisite in health and physical education required: PEd 502, 510, 512, 520, and HEd 500, 540, 569.

School of Music

Charles A. Sprenkle, *Dean*
Alexander Antonowich, *Associate Dean*
Ira C. Singleton, *Associate Dean for Graduate Studies and Research*

Charles A. Sprenkle, B.Mus., B.S., M.Mus., D.Mus.A.	Dean, Professor
Alexander Antonowich, B.S., M.A., Ed.D.	Associate Dean, Professor
Ira C. Singleton, B.S., Ed.M., Ph.d.	Associate Dean for Graduate Studies and Research, Professor
Lois W. Alt, B.S., B.Mus., M.Mus.	Associate Professor of Voice
Edward A. Barrow, B.Mus., M.Mus., Ph.D.	Professor of Brass
Robert M. Bedford, B.Mus., M.S.	Associate Professor of Piano
Margaretta A. Carey, B.S., M.Mus., Ed.D.	Chairman, Department of Music Education, Professor
Paul E. Carson, B.S., M.F.A.	Associate Professor of Woodwinds
Irving H. Cohen, B.A., M.A., Ph.D.	Professor of Music History and Literature
Charles D. Gangemi, B.Mus., M.A.	Associate Professor of Piano
Miriam S. Gottlieb, A.B., M.A.	Associate Professor of Piano
Helen E. Hales, B.Mus., M.Mus.	Associate Professor of Piano
Constantine Johns, B.S., M.A., Ed.D.	Professor of Music History and Literature/Strings
Eugene Klein, B.M.E., M.M.E.	Associate Professor of Cello
Shirley A. Munger, B.A., M.A., D.M.A.	Professor of Music Theory and Composition
Robert E. Pennington, B.Mus., M.Mus., Mus.D.	Professor of Piano
Frederick C. Pflieger, B.S., M.Mus., Ph.D.	Professor of Music History and Literature
Robert D. Schick, B.A., M.A., A.Mus.D.	Professor of Piano
Jane E. Sheppard, B.Mus.Ed., M.A., M.Mus.	Associate Professor of Voice and Choral Music
James E. Smith, B.Mus., M.Mus.	Associate Professor of Violin
H. Lee Southall, B.S., M.A.	Chairman, Department of Instrumental Music, Assistant Professor
Roy D. Sweet, B.S., M.Mus.	Chairman, Department of Vocal and Choral Music, Associate Professor
James C. Thomson, A.B., M.A., M.A., Ph.D.	Chairman, Department of Music History and Literature, Professor
Richard K. Veleta, B.Mus., M.Mus., D.Mus.	Chairman, Department of Keyboard Music, Professor
W. Benjamin Whitten, B.Mus., M.Mus.	Associate Professor of Piano

(Continued)

Harry Wilkinson, B.S., Ed.M., Ph.D.	Professor of Music Theory and Composition/Organ
Lois M. Williams, B.Mus., M.A.	Associate Professor of Music History and Literature/Voice and Choral Music
James J. Wright, B.S., Ed.M., Ph.D.	Chairman, Department of Music Theory and Composition, Professor

The School of Music offers degree programs leading to the Master of Education in music education, the Master of Arts in history and literature of music, and the Master of Music in applied music, music theory, or composition. The design of each candidate's curriculum will be formulated in close liaison between the adviser and the candidate, with consideration for the latter's musical plans, needs, and abilities.

ADMISSION TO DEGREE PROGRAMS IN MUSIC

In addition to meeting the basic requirements of the College, given under Admissions, applicants for a program leading to a master's degree are considered on the basis of their academic record, interviews which evaluate their prospect for successful work at the graduate level, preliminary tests, and auditions to determine prerequisite competencies.

M.Ed. Applicants

Prior to enrollment, applicants must schedule an interview with the Associate Dean for Graduate Studies.

M.A. Applicants

Prior to enrollment, applicants must schedule an interview with the chairman of the Department of Music History and Literature and must submit Graduate Record Examination scores for the morning tests and the afternoon test in music history. They must also demonstrate a reading proficiency in one foreign language, preferably German, although French is also suited to this purpose.

M.Mus. Applicants

The following admission requirements must be met:

1. The applicant must possess an appropriate baccalaureate degree which comprises a program equivalent to that provided in the B.Mus. program at West Chester State College.
2. His admission must be approved by the Associate Dean for Graduate Studies of the School of Music and by the chairman of the area in which he will matriculate. The applicant must arrange for interviews with these officials and others they may designate before full admission can be granted. These interviews will be used both to evaluate the student's qualifications and to explain to him the requirements of the program in which he wishes to enroll.

3. The following pre-entrance examinations are required as appropriate to each area:

   Majors in applied music—the applicant must demonstrate performance ability at an advanced level by performing for an audition committee. A list of his repertoire must be submitted before the audition. (Where distance would impose a heavy burden, an unaltered tape may be submitted as evidence of performing ability; however, an audition may be required following enrollment.)

   Majors in theory and/or composition—must demonstrate sufficient pianistic ability to meet the demands of the program.

   Majors in composition—must submit prior to the audition original works showing technical facility in composition.

DIAGNOSTIC EXAMINATIONS

Diagnostic examinations in music history and music theory may be administered to all applicants by the School of Music and should be taken prior to admission or during the first week of classes.

EXPLANATION OF NUMBERING SYSTEM

Course numbers indicate the area of study in the following manner:

MUSIC	AREA OF STUDY
500-504	Core Requirements
505-514	Music Education
515-549	Applied Music
550-554	Pedagogy
555-564	Literature
565-584	History
585-597	Theory
598-610	Research

DEGREE REQUIREMENTS

Curricula for the programs are given below.

M.Ed. IN MUSIC EDUCATION
(30-34 Semester Hours)

		Semester Hours
I	REQUIRED COURSES	15
	EdF 510 Educational Foundations	3
	Mus 500 Methods and Materials of Research	3
	Mus 501 Aspects of Musical Style I	3
	Mus 502 Aspects of Musical Style II	3
	Mus 510 Current Trends in Music Education	3

THESIS PROGRAM (30 s.h.)

II	AREA OF CONCENTRATION			9
	A. Required		6	
	Section I–Music Education	2		
	Section II–Applied Music	4		
	B. Directed Electives (chosen under advisement from Sections I-V)		3	
III	RESEARCH			6
	Mus 598-599 Research Seminar	3		
	Mus 610 Thesis	3		

NON-THESIS PROGRAM (34 s.h.)

II	AREA OF CONCENTRATION			11
	A. Required		6	
	Section I–Music Education	2		
	Section II–Applied Music	4		
	B. Directed Electives (chosen under advisement from Sections I-V)		5	
III	ALLOWED ELECTIVES			4
	A. Music–Sections I-V	2-4		
	B. Chosen from any curriculum	0-2		
IV	RESEARCH			4
	Mus 598-599 Research Seminar	3		
	Mus 600 Research Report or Mus 604 Recital	1		

MASTER OF MUSIC
(30 Semester Hours)

APPLIED MUSIC

I	REQUIRED COURSES			6
	Mus 501 Aspects of Musical Style I	3		
	Mus 502 Aspects of Musical Style II	3		
II	AREA OF CONCENTRATION (given below for each major)			18
III	ALLOWED ELECTIVES			4
	Music–Sections I-V	2		
	Chosen from any curriculum	2		
IV	RECITAL (Mus 605)			2

PIANO MAJOR

II	AREA OF CONCENTRATION			18
	A. Required		16	
	Mus 543-547 Advanced Individual Lessons	10		
	Mus 556 Piano Literature I	2		

	Mus 557 Piano Literature II	2		
	Mus 523 Ensemble or Mus 528 Accompanying	2		
	B. Directed Elective		2	
	Mus 550 Piano Pedagogy or another course from the area of concentration	2		

VOICE MAJOR

II	AREA OF CONCENTRATION			18
	A. Required		12	
	Mus 543-547 Advanced Individual Lessons	10		
	Mus 523 Ensemble	2		
	B. Directed Electives		6	
	1. Vocal			
	Mus 531 Opera Workshop	2		
	Mus 551 Vocal Pedagogy	2		
	Mus 558 Vocal Literature	2		
	Mus 575 History of the Opera	2		
	2. Choral			
	Mus 533 or 534 Advanced Choral Conducting	2		
	Mus 559 Choral Literature	2		
	Mus 579 Music of the Renaissance Period	2		
	Mus 589 Modal Counterpoint I	2		

INSTRUMENTAL MAJOR

II	AREA OF CONCENTRATION			18
	A. Required		12	
	Mus 543-547 Advanced Individual Lessons	10		
	Mus 523 Ensemble	2		
	B. Directed Electives		6	
	Mus 533 or 534 Advanced Instrumental Conducting	2		
	Mus 552 Marching Band Techniques and Materials	2		
	Mus 555 Instrumental Literature	2		
	Mus 560 Woodwind Literature	2		
	Mus 561 Brass Literature	2		
	Mus 562 String Literature	2		
	Mus 585 Advanced Band Arranging	2		

MASTER OF MUSIC
(30 Semester Hours)

MUSIC THEORY OR COMPOSITION

I	REQUIRED COURSES			6
	Mus 501 Aspects of Musical Style I	3		
	Mus 502 Aspects of Musical Style II	3		
II	AREA OF CONCENTRATION (given below for each major)			16-17

III	ALLOWED ELECTIVES			4
	Music–Sections I-V	2-4		
	Chosen from any curriculum	0-2		
IV	RESEARCH (requirements given below for each major)			3-4

THEORY

II	AREA OF CONCENTRATION IN THEORY OF MUSIC			16
	A. Required		12	
	Mus 527 Advanced Keyboard Harmony	2		
	Mus 588 Advanced Counterpoint	2		
	Mus 589 Modal Counterpoint I	2		
	Mus 590 Modal Counterpoint II	2		
	Mus 591 Advanced Composition I	2		
	Mus 596 Seminar in Music Theory	2		
	B. Directed Electives		4	
	Mus 554 Pedagogy of Music Theory	2		
	Mus 586 Advanced Orchestration	2		
	Mus 587 Advanced Musical Form	2		
	Mus 594 Twentieth Century Musical Styles	2		
	Mus 595 Electronic Music	2		
IV	RESEARCH			4
	A. Mus 599 Seminar	1		
	B. Mus 610 Thesis	3		

COMPOSITION

II	AREA OF CONCENTRATION IN COMPOSITION			17
	A. Required		13	
	Mus 586 Advanced Orchestration	2		
	Mus 588 Advanced Counterpoint	2		
	Mus 589 Modal Counterpoint I	2		
	Mus 591 Advanced Composition I	2		
	Mus 592 Advanced Composition II	2		
	Mus 594 Twentieth Century Musical Styles	2		
	Applied Music (under advisement)	1		
	B. Directed Electives		4	
	Mus 554 Pedagogy of Music Theory	2		
	Mus 587 Advanced Musical Form	2		
	Mus 590 Modal Counterpoint II	2		
	Mus 593 Advanced Composition III	2		
	Mus 595 Electronic Music	2		
	Mus 596 Seminar in Music Theory	2		
IV	RESEARCH			3
	Com 610 Musical Composition	3		

MASTER OF ARTS IN MUSIC
(30 Semester Hours)

HISTORY AND LITERATURE OF MUSIC

I	REQUIRED COURSES				6
	Mus 501 Aspects of Musical Style I			3	
	Mus 502 Aspects of Musical Style II			3	
II	AREA OF CONCENTRATION				16
	A. Required			10	
	1. Mus 565 Introduction to Research in Music History		2		
	2. Choices from the following		8		
	Mus 578 Music of the Medieval Period	2			
	Mus 579 Music of the Renaissance Period	2			
	Mus 580 Music of the Baroque Period	2			
	Mus 581 The Classical Age in Music	2			
	Mus 582 Music in the Romantic Era	2			
	Mus 583 Contemporary Music	2			
	B. Directed Electives			6	
	Section II–Applied Music		0-2		
	Section IV–History of Music		2-6		
	Foreign Language		0-3		
III	ALLOWED ELECTIVES				4
	A. Music–Sections I-V			2	
	B. Choices from any curriculum			2	
IV	RESEARCH				4
	Mus 599 Research Seminar			1	
	Mus 610 Thesis			3	

ELECTIVE COURSES FOR MUSIC STUDENTS

SECTION I. MUSIC EDUCATION

Mus 507	Music Education in the Elementary School	Mus 513	Music in the School Curriculum
Mus 508	Music Education in the Secondary School	Mus 514	Practicum in Music Supervision
Mus 509	Music Appreciation in the General Music Program	Mus 550	Piano Pedagogy
Mus 510	Current Trends in Music Education	Mus 551	Vocal Pedagogy
Mus 511	Administration of Public School Music	Mus 552	Marching Band Techniques and Materials
Mus 512	Psychology of Music	Mus 553	String Pedagogy
		Mus 554	Pedagogy of Music Theory

SECTION II. APPLIED MUSIC

Keyboard

Mus 523	Piano Ensemble	Mus 539-42	Piano or Organ Major
Mus 528	Accompanying	Mus 543-47	Advanced Piano or Organ
Mus 536	Master Class in Piano		

Vocal

Mus 519	Advanced Choir	Mus 533-34	Advanced Choral Conducting
Mus 523	Vocal Ensemble		
Mus 529	Vocal Diction I	Mus 536	Master Class in Voice
Mus 530	Vocal Diction II	Mus 539-42	Voice Major
Mus 531-32	Opera Workshop	Mus 543-47	Advanced Voice

Instrumental

Mus 517-18	Workshop in Music History	Mus 525-26	Class Lessons in Instruments
Mus 519-22	Advanced Band, Advanced Orchestra, Sinfonietta, or Wind Ensemble	Mus 533-34	Advanced Instrumental Conducting
		Mus 536	Master Class in Instruments
		Mus 539-42	Instrument Major
Mus 523	Instrumental Ensemble	Mus 543-47	Advanced Instrument

SECTION III. STRUCTURE AND ORGANIZATION OF MUSIC

Mus 585	Advanced Band Arranging	Mus 592	Advanced Composition II
Mus 586	Advanced Orchestration	Mus 593	Advanced Composition III
Mus 587	Advanced Musical Form	Mus 594	20th Century Musical Styles
Mus 588	Advanced Counterpoint		
Mus 589	Modal Counterpoint I	Mus 595	Electronic Music
Mus 590	Modal Counterpoint II	Mus 596	Seminar in Music Theory
Mus 591	Advanced Composition I		

SECTION IV. LITERATURE AND HISTORY OF MUSIC

Mus 555	Instrumental Literature	Mus 574	History of the Symphony
Mus 556	Piano Literature I	Mus 575	History of the Opera
Mus 557	Piano Literature II	Mus 576	History of Music in the United States
Mus 558	Vocal Literature		
Mus 559	Choral Literature	Mus 577	Music in Non-Western Civilizations
Mus 560	Woodwind Literature		
Mus 561	Brass Literature	Mus 578	Music of the Medieval Period
Mus 562	String Literature		
Mus 564	African and Afro-American Music	Mus 579	Music of the Renaissance Period
Mus 565	Introduction to Research in Music History	Mus 580	Music of the Baroque Period
Mus 569	Special Subjects Seminar	Mus 581	The Classical Age in Music
Mus 570	Bach and His Works		
Mus 571	History of Instruments	Mus 582	Music in the Romantic Era
Mus 572	String Chamber Music		
Mus 573	History of Chamber Music	Mus 583	Contemporary Music

SECTION V. ELECTIVE COURSES FOR ALL STUDENTS

Mus 537-38	Individual Lessons at the Minor Level in Voice, Piano, Organ, and Instruments	Mus 566	Study and Appreciation of the Opera
		Mus 567	Study and Appreciation of the Symphony
		Mus 568	Music Criticism and Aesthetics

SECTION VI. SERVICE COURSES IN MUSIC EDUCATION

Mus 505	Vitalizing Music in the Elementary School	Mus 506	Teaching of Music Appreciation in the Elementary Grades
		Mus 524	Keyboard Activities for the Classroom Teacher

OFFERINGS IN MUSIC

Symbol: Mus (unless otherwise shown)

500 Methods and Materials of Research (3)

Basic techniques and procedures. Major types of research. Methods for locating, evaluating, and interpreting evidence. Preparation of a research outline.

501 Aspects of Musical Style I (3)

Selected master works from the Middle Ages through the late 18th century. The influence of these works on musical thinking, historical, and technical.

502 Aspects of Musical Style II (3)

Selected master works of the 19th and 20th centuries.

505 Vitalizing Music in the Elementary School (2)

Study of song series, instruments, and materials in current use in the elementary classroom.

506 Teaching of Music Appreciation in the Elementary Grades (2)

Primarily for the elementary classroom teacher. Materials for organizing units of study for specific grades. Audio-visual materials for enriching the school music program.

507 Music Education in the Elementary School (2)

For the music educator. Problems, procedures, and materials in the elementary school classroom. PREREQ: elementary music methods, teaching experience.

508 Music Education in the Secondary School (2)

The music curriculum in the secondary school. Emphasis on conceptual learning, structured curriculum, independent study, and aesthetic experience. PREREQ: secondary school music methods, teaching experience.

509 Music Appreciation in the General Music Program (2)

Approaches to listening experiences and heightened appreciation of music. Materials which elicit pupil response.

510 Current Trends in Music Education (3)

Principles and philosophy of music education in relation to modern educational philosophy and curriculum practices. PREREQ: elementary and secondary music methods.

511 Administration and Supervision of School Music (2)

Administrative problems, curricular content and scheduling, in-service training of teachers, and specialized supervisory techniques for the music curriculum. PREREQ: teaching experience.

512 Psychology of Music (2)

In-depth study of learning theories as related to music education and the nature of music.

513 Music in the School Curriculum (2)

Approaches to curriculum construction. Evaluation of the music program as an integral part of the school curriculum. PREREQ: teaching experience.

514 Practicum in Music Supervision (2)

Observation and participation in music supervision in an approved public school in cooperation with qualified school personnel. Professional conferences and observations by practicum supervisor. PREREQ: graduate degree.

517-18 Workshop in Music History (1)

Study of music of the Medieval, Renaissance, and Baroque Periods through performance and analysis. The course is varied according to the students' instruments and vocal ranges.

519-22 Advanced Choir, Concert Band, Marching Band, Advanced Orchestra, Sinfonietta, or Wind Ensemble (1)

Participation in preparation of programs for concert performance. PREREQ: previous performance in appropriate organizations and/or admission by audition.

523 Ensembles in Piano, Voice, Woodwinds, Brass, Strings, or Mixed (2)

Study and performance in selected ensembles arranged to the specific needs of the students. PREREQ: performance ability at the major level.

524 Keyboard Activities for the Classroom Teacher (2)

A functional study of the piano, primarily for the elementary classroom teacher. Accompanying in the classroom; rhythmic and creative activities; practical classroom materials.

525-26 Class Lessons in Woodwinds, Brass, Percussion or Strings (2)

Techniques and literature through performance. PREREQ: ability to perform at the level of a second-year student.

527 Advanced Keyboard Harmony (2)

Use of the piano as a tool in the teaching of music theory. Includes chorale harmonization, examples of the traditional sonorities, contrapuntal exercises, "free style" improvisation, and use of contemporary techniques.

528 Accompanying (2)

Principles and problems of accompanying. Vocal and instrumental literature. Studio accompanying at all levels of difficulty. PREREQ: 4 credits in piano.

529 Vocal Diction I (2)

English, Italian, and Latin diction. A laboratory course to establish correct pronunciation in singing. The phonetics of these languages are used in selected song repertoire.

530 Vocal Diction II (2)

French and German diction. A laboratory course, as described in Mus 529. Mus 529 is not prerequisite.

531-32 Opera Workshop (2)

Techniques of producing musical plays. Course study of music and acting only. Preparation of roles, coaching, conducting rehearsals. The workshop experience may lead to a public performance of the material studied.

533-34 Advanced Conducting (2)

Study and application of techniques. Ability is developed to read and conduct full scores of major works for large groups. Section 1, Choral. Section 2, Instrumental. PREREQ: undergraduate conducting.

536 Master Classes in Piano, Organ, Voice, Woodwinds, Brass, Percussion, or Strings (1-2)

Discussion and performance of literature in the students' current repertoires. Demonstrations by the course professor and/or guest artists. PREREQ: students must be currently enrolled for individual lessons at the major or advanced performing level.

537-38 Individual Lessons at the Minor Level in Piano, Organ, Voice, Woodwinds, Brass, Percussion, or Strings (1)

Individual half-hour lessons in all areas,* once weekly. An elective course for all graduate students.

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* Areas of performance in applied music: piano, organ, voice, flute, oboe, English horn, clarinet, bassoon, French horn, trumpet, trombone, baritone, tuba, violin, viola, cello, bass, percussion.

539-42 Individual Lessons at the Major Level in Piano, Organ, Voice, Woodwinds, Brass, Percussion, or Strings (1-2)

Individual half-hour lessons in all areas.* Continued study in the development of repertoire and performing skills. Students may be given permission to register for two course numbers in the same semester, earning the second credit by doing additional outside work and performing in a recital. PREREQ: completion of the applied-music-major requirements at the undergraduate level or admission by audition.

543-47 Individual Lessons at the Advanced Level in Piano, Organ, Voice, Woodwinds, Brass, Percussion, or Strings (2-4)

Individual half-hour lessons in all areas,* once weekly. Advanced studies leading to a full-length recital at the master's level. PREREQ: completion of the applied-music-major requirements for the Bachelor of Music degree and/or admission by audition.

550 Piano Pedagogy (2)

Principles and procedures of piano teaching at all levels. Opportunity to teach and prepare criticism. PREREQ: teaching experience or evidence of sufficient pianistic background.

551 Vocal Pedagogy (2)

Principles and techniques of teaching voice at all levels. Materials and procedures for improving tone quality of the individual and the choral group. PREREQ: teaching experience or evidence of pianistic and sufficient vocal background.

552 Marching Band Techniques and Materials (2)

Organization, music materials, care of instruments and uniforms, marching essentials, and contemporary techniques.

553 String Pedagogy (2)

Principles and procedures of string teaching. Problems in teaching string classes. Techniques, materials, and methods. PREREQ: teaching experience or evidence of sufficient background in string performance.

554 Pedagogy of Music Theory (2)

Techniques and materials for teaching music theory. A comparative study of outstanding theorists, past and present.

555 Instrumental Literature (2)

Instrumental materials for all levels of public schools. Program building and music for special occasions. Class performance, scores, and recordings are used. PREREQ: instrumental methods, performing ability.

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* Areas of performance in applied music: piano, organ, voice, flute, oboe, English horn, clarinet, bassoon, French horn, trumpet, trombone, baritone, tuba, violin, viola, cello, bass, percussion.

556 Piano Literature I (2)

Representative examples from early keyboard music, including harpsichord, through the mid-19th century. Illustrated through performance by the instructor and members of the class and by scores and recordings. PREREQ: performance ability at the major or advanced level.

557 Piano Literature II (2)

Representative examples of keyboard music from the late 19th and 20th centuries. PREREQ: same as Mus 556.

558 Vocal Literature (2)

Classic song literature, lieder, and modern art songs. Illustrated through performance by the instructor and members of the class and by scores and recordings.

559 Choral Literature (2)

Representative examples of choral music from the various periods. Research in a selected phase of the literature required.

560 Woodwind Literature (2)

A comprehensive evaluation of materials for solos and ensembles through performance by the instructor and members of the class and by use of scores and recordings. PREREQ: performing ability.

561 Brass Literature (2)

A survey of solo, ensemble, and orchestral music for brass instruments, including consideration of teaching materials.

562 String Literature (2)

Evaluation of materials for solos and ensembles through performance by the instructor and members of the class and by use of scores and recordings. PREREQ: performing ability.

564 African and Afro-American Music (2)

Folk music, spirituals, work songs, field hollers, blues, ragtime, jazz, gospel songs, soul music, rock and roll. Includes some art music by black composers. PREREQ: an introductory music course.

565 Introduction to Research in Music History (2)

Thorough orientation in bibliographical materials and research methods. Ability to read at least one foreign language required. PREREQ: approval of instructor.

566 Study and Appreciation of the Opera (2)

The opera from its origin to the present. Works from Monteverdi and Gluck to Britten, Stravinsky, and Menotti. An elective course for all students.

567 Study and Appreciation of the Symphony (2)

Musical forms and literature of the symphony. A non-technical approach to analysis and enjoyment. An elective course for all students.

568 Music Criticism and Aesthetics (2)

The nature of music, including philosophies of its meaning. Study of music criticism, past and present. Exercises in reviewing concerts and recordings. An elective course for all students.

569 Special Subjects Seminar (1-2)

Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

570 Bach and His Works (2)

The life of J.S. Bach; works for organ, keyboard, and other instruments; cantatas and larger choral works. Introduced with a review of contemporary trends in music, the visual arts, history, and religion as they affected his composition.

571 History of Instruments (2)

A comprehensive study of the appearance and uses of important musical instruments in Western Europe from the Middle Ages to the present according to chronology and category.

572 String Chamber Music (2)

Intensive study of important works of string ensemble literature through reading, rehearsing, and performing. May include a public performance.

573 History of Chamber Music (2)

The history, forms, and changing styles and media of chamber music from the 16th century to the present. Principal composers are studied.

574 History of the Symphony (2)

How the symphony orchestra developed from the Baroque Period to the present in its function, literature, instrumentation, and performance practices.

575 History of the Opera (2)

The composers and their major contributions to the various schools of opera. PREREQ: 6 credits of history of music.

576 History of Music in the United States (2)

Analysis of music and musical trends in America from the Pilgrims to the present.

577 Music in Non-Western Civilizations (2)

The music of pre-history, or primitive people of the present time, and the history and nature of oriental music and instruments.

578 Music of the Medieval Period (2)

Development of plainsong and secular monody and beginnings and early history of polyphony to the 14th century. Consideration of contemporary trends in the visual arts, history, and literature.

579 Music of the Renaissance Period (2)

Sacred and secular music in the Age of Dufay; changing forms and styles through the music of the Franco-Flemish Groups; the frottola and related forms; Palestrina and his contemporaries. Brief consideration of contemporary trends in the visual arts, history, and literature.

580 Music of the Baroque Period (2)

Styles and forms of Baroque repertoire; contributions of the major composers; role of music and musicians in the society of the period.

581 The Classical Age in Music (2)

Changing styles and forms in: the sons of J.S. Bach; the Viennese pre-classicists; the Mannheim School; opera; Joseph and Michael Haydn, Mozart, and their contemporaries; and the early works of Beethoven.

582 Music in the Romantic Era (2)

Historical developments during the Romantic Period (circa 1800-1900). Analysis of changes and trends; comparative aspects of new forms.

583 Contemporary Music (2)

Chronological survey of 20th-century music. Development of styles. Technical aspects of changes occurring in melody, rhythm, orchestration, texture, tonality, and form.

585 Advanced Band Arranging (2)

Emphasis on arranging for school bands. Consideration given to bands with inexperienced performers and limited instrumentation. PREREQ: teaching experience and a knowledge of orchestration.

586 Advanced Orchestration (2)

Original composition for orchestra. PREREQ: a knowledge of the instruments of the orchestra and experience in their use.

587 Advanced Musical Form (2)

A detailed study of musical form, with emphasis on modifications of sonata form; vocal and instrumental forms of Baroque music; and forms which are unique.

588 Advanced Counterpoint (2)

Tonal counterpoint. Invention, canon, chorale forms, invertible counterpoint, and fugue. PREREQ: Counterpoint I at the undergraduate level.

589 Modal Counterpoint I (2)

Use of modes, musica ficta, and cadences in 16th-century music. Experience in imitation in two parts, using all note values; double counterpoint; pronunciation and setting of Latin texts.

590 Modal Counterpoint II (2)

Continuation of Mus 589. Writing in three and more voices. PREREQ: Mus 589.

591 Advanced Composition I (2)

Free composition in the larger forms, employing ensembles of more than three performers; experience in writing for solo voice and chorus. PREREQ: undergraduate course in composition.

592 Advanced Composition II (2)

Free composition for chamber groups and orchestra. PREREQ: Mus 591.

593 Advanced Composition III (2)

Continuation of Mus 592. PREREQ: Mus 592.

594 20th-Century Musical Styles (2)

Theoretical study of the compositional techniques of representative contemporary composers, including related study of harmony and form. Creative work in the styles of the composers studied is attempted.

595 Electronic Music (2)

Materials and techniques of electronic music and their use in composition. Laboratory experience in the composition of electronic music.

596 Seminar in Music Theory (2)

Intensive work in selected areas of music theory. Guidance in individual projects leading to significant current developments in theory. PREREQ: permission of the chairman of the Department of Theory and Composition.

598-99 Research Seminar in Music (2) (1)

A research proposal with supporting procedures is developed. Guidance in individual research topics, with tutorial assistance in form and style of research writing.

600 Research Report (1)

604 Recital (1)

A shared (half) recital open to candidates for the Master of Education degree. In lieu of Research Report. Program notes required. PREREQ: approval by committee examination.

605 Recital (2)

A full public recital, demonstrating an understanding of various performance styles and ability to perform literature from several periods. Required of candidates for the Master of Music in applied music. PREREQ: approval by committee examination.

Com 610 Musical Composition (3)

An advanced composition of significant proportion, demonstrating skill in creative writing for a chosen medium.

610 Thesis in Music Education, Theory, or History and Literature (3)

School of Sciences and Mathematics

Russell K. Rickert, *Dean*

Department of Biology
Department of Chemistry
Department of Earth, Space, and General Sciences
Department of Mathematics
Department of Nursing
Department of Physics

Degree Programs Offered:

Master of Education in
- Biology
- Chemistry
- Earth and Space Science
- Mathematics
- Physical Science

Master of Arts in
- Biology
- Mathematics

Master of Science in
- Chemistry

Biology

Dr. Brown, Chairman

Mr. McDonnell, Coordinator for Graduate Studies

PROFESSORS
Relis B. Brown, A.B., Ph.D.
Carmela L. Cinquina, B.S., M.S., Ph.D.
Thomas DeMott, A.M.E., V.M.D.
John E. C. Dorchester, B.A., M.A., Ph.D.
William R. Overlease, B.S., B.S.F., M.S., Ph.D.
Ronald F. Romig, B.S., M.Ed., Ph.D.
Willard J. Trezise, B.S., M.S., Ph.D.
Richard I. Woodruff, B.S., M.Ed., Ph.D.

ASSOCIATE PROFESSORS
Robert W. Bernhardt, B.S., M.S.
Georgann Cullen, B.S., M.A.
James M. McDonnell, A.B., M.A.
Margaret Y. Martinez, A.B., M.A.
W. Clyde Skillen, B.S., M.S.

ASSISTANT PROFESSORS
Harry G. Jones, B.S., M.S.
Timothy P. Sullivan, B.S., M.S., Ph.D.

The Department of Biology offers two degree programs, one leading to the Master of Education in biology and the other to the Master of Arts in biology.

ADMISSION TO THE PROGRAMS

Applicants for either program must meet the general requirements for admission to degree study at West Chester and, in addition, must submit scores for the Graduate Record Examination (verbal, quantitative, and advanced biology).

ADMISSION TO THE M.Ed. PROGRAM

Applicants must present a minimum of two semesters of general college chemistry, one semester of organic chemistry, and at least 18 semester hours of biological science.

ADMISSION TO THE M.A. PROGRAM

Applicants must present a minimum of two semesters of general college chemistry, one semester of organic chemistry, one semester of mathematics, and at least 24 semester hours of biological science.

DEGREE CANDIDACY

In addition to fulfilling other requirements, a student applying for degree candidacy must perform satisfactorily on a written examination for which he applies to the coordinator.

REQUIREMENTS FOR THE M.Ed. DEGREE

1. Satisfactory completion of the curriculum outlined below.
2. Successful performance on a comprehensive oral examination which may be taken after completion of 28 hours of course work.

REQUIREMENTS FOR THE M.A. DEGREE

1. Satisfactory completion of the curriculum outlined below.
2. Successful performance on an oral defense of the thesis or a comprehensive oral examination.
3. Successful demonstration of a reading proficiency in a foreign language acceptable to the department, or of some other professional skill acceptable to the department.

MASTER OF EDUCATION IN BIOLOGY
(34 Semester Hours)

			Semester Hours
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85—School of Education)		10-12
II	AREA OF CONCENTRATION		20-22
	A. Required		
	Bio 500 Methods and Materials in Biological Research	2	
	B. Electives, chosen from list below, with adviser's approval	18-20	
III	ELECTIVES (Professional or Academic)		0-4

MASTER OF ARTS IN BIOLOGY
(30 Semester Hours)

		Semester Hours
I	AREA OF CONCENTRATION All 24 hours may be chosen from approved courses in biology, or, under advisement, up to 6 hours in related work may be offered.	24
II	OPTION (The student will choose to satisfy one of the following options)	6

A. Thesis (Bio 610)
The thesis should be based on independent laboratory or field observations and should constitute a contribution to existing knowledge. Although publication is not a requirement, the thesis should be in a format acceptable to any standard journal in the field. The candidate will be expected to defend the thesis in an oral examination.

or

B. Seminars in Biology
(Chosen from Bio 520-550-560-570-590)
The candidate will participate in three seminars, each for 2 semester hours of credit. The seminars must be in three different areas of biology, and are chosen by the student subject to the approval of his faculty adviser. The content of these seminars will figure prominently in the comprehensive oral examination.

OFFERINGS IN BIOLOGY

Symbol: Bio

500 Methods and Materials in Biological Research (2)
Literature searching in biology; preparations of scientific reports; experimental design.

501 Modern Techniques of Teaching Biology (3)
Contemporary methods in biology teaching including laboratory preparations and presentations.

502 Introductory Biochemistry (3)
Background for teaching biology in the secondary school. Elements of organic chemistry, solutions, buffers, enzyme action, structure and metabolism of biological compounds. Some illustrative laboratory exercises. PREREQ: college biology.

503 Mammalian Physiology (3)
Fundamental physiological processes in mammals. PREREQ: college biology.

504 Ecological Concepts (3)
Ecological concepts and information important for biology teachers. PREREQ: college biology or permission of instructor.

505 Field Ecology and Natural History (3)
Identification of natural forms in local habitats. A course for endorsement of teachers in outdoor education. Not applicable to a master's degree in biology.

510 History of Biology (3)

Development of biology from the earliest records. PREREQ: general zoology, general botany.

520 Seminar in Cellular Biology (2)

Oral and written reports on topics drawn from such areas as cellular physiology, cytology, genetics, histology, and microbiology. PREREQ: permission of department.

528 Animal Histology (3)

Structure and function of animal tissues and organs. PREREQ: college biology or zoology.

530 Genetic Theory (3)

Theory of mutation of genes, chromosomal mappings; chromosomal abnormalities; principles of dominance and recessiveness; multiple factors; lethal factors; the nature of DNA. PREREQ: college biology or general zoology and general botany.

539 Human Heredity (3)

The innate qualities of human beings and the genetic basis for these qualities. PREREQ: general genetics or permission of instructor.

543 Experimental Embryology (3)

A laboratory course introducing the student to experimental embryology. PREREQ: embryology and organic chemistry or permission of instructor.

549 Developmental Anatomy (3)

Anatomy of human reproductive systems and fundamentals of human development. PREREQ: college biology or zoology.

550 Seminar in Organismic Biology (2)

Oral and written reports on topics drawn from such areas as development, morphology, physiology, systematics, and particular groups of organisms. PREREQ: permission of department.

552 Comparative Parasitology (3)

Morphology and life cycles of the important parasites of man and animals; epidemiology, pathogenesis, and methods of treatment and control. Two hours lecture and three hours lab. PREREQ: college biology or zoology.

556 Advanced Plant Anatomy and Morphology (3)

Macroscopic and microscopic structure of plants and plant parts. PREREQ: college botany or permission of instructor.

557 Insect Morphology (3)

Structure of insects; variations of form in the principal orders. PREREQ: college biology.

558 Comparative Mammalogy (3)

Morphology, evolution, systematics, life cycles, behavior, and distribution of mammals; ecology, economics, and conservation of the group.

560 Seminar in Molecular Biology (2)

Oral and written reports on topics drawn from such areas as biochemistry, biophysics, and microbiology. PREREQ: permission of department.

561 Biochemistry I (3)

Chemistry of carbohydrates, fats, proteins, and phosphorus compounds. PREREQ: inorganic chemistry, one semester of organic chemistry.

562 Biochemistry II (3)

Continuation of Bio 561: bioenergetics; enzymology; metabolism of carbohydrates, fats, proteins. PREREQ: Bio 561 or equivalent.

564 Advanced Bacteriology (3)

Bacteriological structure and metabolism with emphasis on laboratory techniques. Advances as described in current literature. PREREQ: bacteriology, organic chemistry.

566 Physiology of Plants (3)

Plant-cell physiology including respiration, photosynthesis, enzyme catalysis, auxins, membrane phenomena. PREREQ: college botany, organic chemistry.

567 Endocrinology (3)

Anatomy and physiology of the ductless glands and the role of hormones in regulation and coordination of body processes. PREREQ: college biology and organic chemistry.

570 Seminar in Populational Biology (2)

Oral and written reports on topics drawn from such areas as biogeography, ecology, evolution, and natural history. PREREQ: permission of department.

572 Applied Ecology (3)

Principles of ecology applied in the practice of resource management: forestry, wildlife management, park management, agricultural planning, urban planning. PREREQ: Bio 504 or equivalent.

573 Economic Entomology (3)

Beneficial and deleterious influences exerted by insects upon man's welfare. PREREQ: college biology.

575 Limnology (3)

Physical, chemical, and geological features of the freshwater environment in the biology of freshwater algae. PREREQ: college botany, general ecology.

577 Animal Ecology (3)

Interrelationships of organisms and the environment, including physical and biological factors. PREREQ: general zoology or college biology.

578 Freshwater Invertebrates (3)

Morphology, taxonomy, and bionomics of freshwater invertebrates. PREREQ: college biology.

579 Human Ecology (3)

The urban ecosystem, approached through study of the major biotic and abiotic components of a local urban community. Problems of urban and regional planning and action. PREREQ: college biology, ecology, or permission of instructor.

580 Experimental Biology (3)

Experimental approaches to biology including measurement, instrumentation, and experimental design. PREREQ: two years of college biology.

581 Microtechnique Laboratory (2)

Introduction to histological and histochemical techniques. PREREQ: animal histology or permission of instructor.

583 Ecological Techniques (3)

Field and laboratory techniques in collection and handling of environmental and biotic data. PREREQ: college ecology.

585 Systematic Botany (3)

Principles of taxonomy and biosystematics. Selected plant families from tropical and temperate zones. Each student develops proficiency in the use of a modern flora and knowledge of the common species of one spring flora of Chester County. PREREQ: college botany or permission of instructor.

587 Systematic Zoology (3)

Principles and procedures governing the classification of animals. PREREQ: college biology.

588 Medical Entomology (3)

The relation of arthropods (principally insects) to diseases of man. PREREQ: college biology.

590 Seminar in Biological Principles (2)

Discussion and written reports on topics of current interest in biology.PREREQ: permission of department.

591 Independent Study in Biology I (1-3)

Individual research under the guidance of a faculty member. PREREQ: permission of instructor.

592 Independent Study in Biology II (1-3)
Individual research under the guidance of a faculty member. PREREQ: permission of instructor.

593 Independent Study in Biology III (1-3)
Individual research under the guidance of a faculty member. PREREQ: permission of instructor.

600 Research Report (1-3)

610 Thesis (6)

Chemistry

Dr. Durand, Chairman

PROFESSORS
Eleanor W. Ashkenaz, B.S., Ph.D.
Justo B. Bravo, B.S., Ph.D.
Marc L. Durand, B.S., Ph.D.
Robert W. Medeiros, B.S., M.S., Ph.D.
Francis J. Reynolds, B.S., Ph.D.
Philip B. Rudnick, B.A., B.A., Ph.D.
William Torop, A.B., M.S., Ed.D.

ASSOCIATE PROFESSORS
Robert F. Foery, B.S., M.S., Ph.D.
Ardis M. Williams, A.B., A.M.

The Department of Chemistry offers programs leading to the Master of Education and the Master of Science in chemistry.

M.Ed. PROGRAM

Admission Requirements

In addition to meeting the general requirements for admission to a degree program at West Chester, applicants must present an undergraduate background including mathematics through calculus and 24 semester hours of undergraduate chemistry.

At the discretion of the department chairman, Graduate Record Examination scores may be required for evaluation and guidance.

Degree Requirements

1. If academic or professional performance is less than satisfactory during the pre-candidacy period, the student may be required to enroll in an appropriate undergraduate course.
2. Successful performance on a comprehensive oral examination given upon completion of the program.
3. Successful completion of the program outlined below.

M.S. PROGRAM

Admission Requirements

In addition to meeting the general requirements for a degree program at West Chester, applicants must present an undergraduate background including mathematics through calculus, one semester of analytical chemistry, and full-year courses in organic chemistry and physical chemistry.

Degree Requirements

1. If academic or professional performance is less than satisfactory during the pre-candidacy period, the student may be required to enroll in an appropriate undergraduate course.
2. At the discretion of the department chairman, Graduate Record Examination scores may be required for purposes of evaluation and guidance.
3. A reading proficiency in any one of the following modern languages: German, French, or Russian. The reading test is administered by the Department of Foreign Languages. A demonstrated proficiency in a computer language (FORTRAN, etc.) may be substituted for the above.
4. Successful performance on a comprehensive oral examination. If applicable, this may be based on the area of research represented by the thesis.
5. Successful completion of the program outlined below.

MASTER OF EDUCATION IN CHEMISTRY
(34 Semester Hours)

			Semester Hours	
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85–School of Education)			10-12
II	AREA OF CONCENTRATION			20-22
	A. Required		15	
	ScE 500 Modern Trends in Science Education	3		
	Che 511 Advanced Inorganic Chemistry I	3		
	Che 521 Advanced Analytical Chemistry	3		

	Che 531 Organic Reaction Mechanisms	3	
	Che 541 Physical Chemistry for Teachers	3	
	[Those who have completed an undergraduate course in physical chemistry take Che 540 in place of Che 541]		
	B. Electives, under advisement	5-7	
III	ELECTIVES (Professional or Academic)		0-4

MASTER OF SCIENCE IN CHEMISTRY
(30 Semester Hours)

I	AREA OF CONCENTRATION		9
	Required Area		
	Che 511 Advanced Inorganic Chemistry I	3	
	Che 531 Organic Reaction Mechanisms	3	
	Che 545 Chemical Thermodynamics	3	
II	THESIS OR NON THESIS OPTION		6
	Che 610 Research and Thesis	6	
	or		
	Any two of the following:		
	Che 515 Topics in Inorganic Chemistry	3	
	Che 525 Topics in Analytical Chemistry	3	
	Che 533 Topics in Organic Chemistry	3	
	Che 542 Topics in Physical Chemistry	3	
	Che 575 Topics in Biochemistry	3	
III	ELECTIVE AREA		15
	Selected under advisement.		
	Courses in chemistry	12	
	Electives from other areas of science or from mathematics (If a computer science course is taken in order to satisfy the language requirement, it cannot be counted as an elective here.)	3	

OFFERINGS IN CHEMISTRY

Symbol: Che

501 History and Literature of Chemistry (2)

Development of chemical theories; rise of the experimental method; impact of major chemical discoveries on modern man. Use of published materials in chemical work. Library techniques; methods of information retrieval.

502 Modern Trends in Teaching Chemistry (2)

Introduction to current research in chemical education. New curricula and tools for teaching including audio-tutorial and programmed instruction.

508 Environmental Aspects of Industrial and Engineering Chemistry (3)

Applications of elementary chemical engineering to the industrial complexities of the environmental processes. Emphasis on unit operations and unit processes applicable to pollution control and abatement.

511 Advanced Inorganic Chemistry I (3)

Structure and properties of the elements and their compounds from a theoretical point of view; horizontal, vertical, and diagonal relationships in the periodic table.

512 Advanced Inorganic Chemistry II (3)

Continuation of Che 511 with emphasis on the preparation and properties of the lanthanides, actinides, and other transition elements. PREREQ: Che 511.

513 Principles of Geochemistry (also ESS 513) (3)

Migration and distribution of the chemical elements within the earth; chemistry of the lithosphere, atmosphere, hydrosphere, and biosphere; chemical changes throughout earth history; the geochemical cycle.

515 Topics in Inorganic Chemistry (3)

Topics of current interest in inorganic chemistry. Topic to be announced prior to registration.

516 Inorganic Preparations (2)

A laboratory course in advanced techniques for the synthesis of inorganic compounds.

521 Advanced Analytical Chemistry (3)

Analytical methods and techniques; theory and application of chemical instrumentation.

523 Laboratory Analysis of Eco Systems (3)

Lecture and laboratory experience in sampling techniques and methods of analysis currently employed in pollution control and abatement.

525 Topics in Analytical Chemistry (3)

In-depth examination of current topics in instrumental or wet chemical analysis. Special emphasis on state-of-the-art development and applications.

530 Organic Chemistry for Teachers (3)

A survey course for teachers with no background in organic chemistry. PREREQ: 1 year of college chemistry.

531 Organic Reaction Mechanisms (3)

Theoretical treatment of selected organic reactions. Emphasis on bonding theory, structural relationships, equilibria, and free-energy relationships.

532 Synthetic Organic Chemistry (3)
Discussion of selected topics in synthetic organic chemistry.

533 Topics in Organic Chemistry (3)
Topics of current interest in organic chemistry. Topic announced prior to registration.

535 Qualitative Organic Analysis (3)
Identification of pure organic compounds and mixtures of organic compounds, using classical and modern instrumental techniques. Laboratory included.

536 Polymer Chemistry (3)
Polymerization kinetics, rheology of polymer melts, crystallization parameters, and monomer reactivity in copolymerization.

540 Advanced Physical Chemistry (3)
Basic quantum chemistry, including the hydrogen-atom problem, chemical bonding, and spectroscopic concepts.

541 Physical Chemistry for Teachers (3)
For chemistry teachers with no background in physical chemistry. Introduction to thermodynamics, kinetics, and quantum chemistry. PREREQ: integral calculus, general chemistry, general physics.

542 Topics in Physical Chemistry (3)
Topics of current interest in physical chemistry. Topic announced prior to registration.

545 Chemical Thermodynamics (3)
Laws and functions of thermodynamics and their applications: introduction to statistical thermodynamics.

551 Chemistry of Coordination Compounds (3)
Principles of complex formation; application of the crystal field theory, various complexing agents, and chemical implications of coordinated compounds. PREREQ: Che 511.

561 Nuclear and Radiochemistry (3)
Nuclear reactions, emissions of various particles, radio chemical applications.

563 Electrochemistry (3)
Principles of electrochemical systems and galvanic cells; electrolytic applications in instrumentation and research. PREREQ: Che 511.

575 Topics in Biochemistry (3)
Topics of current interest in biochemistry. Topic announced prior to registration.

580 Workshop for Secondary School Chemistry Teachers (3)
Topic announced when offered.

591 Seminar (1-2)
Topics of current interest in chemistry.

610 Research and Thesis (6)
An original investigation in a specific area under a staff member.

Any of the following undergraduate 400-level courses (but not more than 6 semester hours of credit) may be taken for graduate credit toward the degree:

Che

403 Chemistry of the Environment (3)
424 Instrumental Methods of Analysis (2)
429 Instrumental Analysis Laboratory (3)
471 Fundamentals of Biochemistry (3)
476 Experimental Biochemistry (2)

Earth and Space Science

Dr. Greenberg, Chairman

PROFESSORS
Seymour S. Greenberg, B.S., A.M., Ph.D.
George F. Reed, B.S., M.S., Ed.D.
Russell K. Rickert, B.S., M.S., Ed.D.
William Torop, A.B., M.S., Ed.D.

ASSOCIATE PROFESSORS
Louis A. Casciato, B.S., M.S.
John E. Ehleiter, A.B., M.A.
Hubert E. Harber, B.S., M.B.S., M.A.T.
Paul R. Widick, B.A., M.Ed., M.A.

The Department of Earth, Space, and General Sciences offers a program leading to the Master of Education in earth and space science. The candidate successfully completing the program will have a thorough understanding of the science subject matter, curriculum, and procedures of junior high schools. He will also be well prepared to teach earth and space sciences at any secondary school level.

ADMISSION TO THE PROGRAM

In addition to meeting the general requirements for admission to a degree program at West Chester State College, a student must have the competencies represented by one year of each of the following: college biology, college chemistry, college mathematics, and college physics.

DEGREE CANDIDACY

Degree candidacy will be determined by a departmental committee after a student has completed 6 but before he has completed 15 semester hours of work required for the degree.

GRADUATE RECORD EXAMINATION

The Graduate Record Examination is not required, but applicants may be asked to submit to a departmental examination that will be used for counseling purposes.

FINAL EXAMINATION

During his last two semesters of course work, the degree candidate must pass an oral comprehensive examination. Candidates who do not perform acceptably on the examination may repeat it.

MASTER OF EDUCATION IN EARTH AND SPACE SCIENCE
(34 Semester Hours)

			Semester Hours	
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85–School of Education)			10-12
II	AREA OF CONCENTRATION			20-22
	A. Required		15	
	ScE 500 Modern Trends in Science Education	3		
	ESS 510 Principles of Physical Geology	3		
	ESS 512 Historical Geology	3		
	ESS 550 General Astronomy	3		
	ESS 552 Space Science	3		
	(Upon agreement of the department faculty, another course may be substituted for any of the ESS courses listed above.)			
	B. Electives, under advisement		5-7	
III	ELECTIVES (Professional or Academic)			0-4

OFFERINGS IN EARTH AND SPACE SCIENCE

Symbol: ESS

501 Earth Sciences for Secondary School Teachers (3)
The earth's composition and history; processes that occur on and within the earth. Recent curricula and teaching materials.

502 Modern Trends in Teaching Earth and Space Science (3)
Recent materials and techniques in secondary-school earth and space science.

510 Principles of Physical Geology (3)
Composition of the earth (minerals and rocks) and earth processes (weathering, erosion, metamorphism, volcanism, diastrophism).

512 Historical Geology (3)
Geologic history of the earth and the evidences for this history. Examination of fossils and geologic maps.

513 Principles of Geochemistry (also Che 513) (3)
Migration and distribution of the chemical elements within the earth; chemistry of the lithosphere, atmosphere, hydrosphere, and biosphere; chemical changes throughout earth history; the geochemical cycle.

514 Mineralogy for the Science Teacher (3)
Properties, identification, occurrence, and crystallography of the more important minerals. Fundamentals of mineral composition and structure.

521 Workshop in Rocks and Minerals (3)
Primarily for elementary school teachers. Fundamental principles for the origin, classification, and identification of rocks and minerals.

523 General Geologic Field Studies of Southeastern Penna. (3)
Occurrence, relationships, and geologic history of the rocks, minerals, and soils of this area, studied at representative locations.

530 Principles of Oceanography (3)
Geology of the ocean floor, water movements, chemical characteristics of sea water, vertical and horizontal distribution of plants and animals. Brief history of oceanography.

540 Introduction to Meteorology (3)
Composition and properties of the atmosphere and principles that influence weather conditions.

550 General Astronomy (3)
Astronomical bodies from the earth to distant galaxies. Man's place in the universe.

552 Space Science (3)
Topics from astronomy and related sciences including problems and results of exploring the universe beyond earth's atmosphere.

556 Workshop in Aerospace Science (3)
Activities and materials adaptable to elementary school instruction in aeronautics, astronomy, meteorology, rocketry, and space biology.

558 The Physical Environment (3)
Field examination of the geologic, oceanographic, and meteorologic aspects of the environment.

560 Institute in Planetarium Education (1-3)
Fundamental concepts that can be taught in the planetarium; planetarium teaching methods; operation, use, and maintenance of the planetarium. Summers only.

571 Astronomy for the Elementary Teacher (3)
Basic concepts in astronomy and their application to the elementary-school program.

575 Teaching Astronomy in the Secondary School (3)
The use of the planetarium, observatory, and other special devices in teaching astronomy in the secondary school.

591 Independent Study in Earth and Space Science (1-3)
Topics of current interest in earth and space science. PREREQ: permission of department.

593 Research Report (2)
An investigation by an individual student. PREREQ: permission of department.

SCIENCE OFFERINGS DESIGNED FOR ELEMENTARY SCHOOL TEACHERS

ESS	556	Workshop in Aerospace Science
ESS	560	The Physical Environment
ESS	571	Astronomy for the Elementary Teacher
PhS	570	Chemistry for the Elementary Teacher
ScE	520	New Trends in Elementary School Science Curriculum
ScE	523	Instructional Materials in Elementary Science
ScE	595	Elementary School Science Instruction
ScE	596	Workshop in Elementary School Science Instruction

Mathematics

Dr. Branton, Chairman

PROFESSORS
Richard G. Branton, B.S., M.S., Ph.D.
Sebastian S. Koh, B.S., M.A., Ph.D.
James E. L'heureux, B.S., M.S., Ph.D.
Eli M. Mandelbaum, B.A., M.A., Ph.D.
Michael Montemuro, B.A., M.A., Ed.D.
Tzee-Nan K. Lo, B.S., M.S., Ph.D.
Frank E. Milliman, B.N.S., A.B., A.M.
Joseph G. Moser, B.S., M.S.
William H. Seybold, B.S., M.A.
C. Ralph Verno, B.A., B.D., M.S.
Sol Weiss, B.S., M.A.

ASSOCIATE PROFESSORS
Thomas J. Ahlborn, B.S., M.A.
Ronald E. Cote, B.A., M.S.
Thomas Egan, B.S., M.Ed.

ASSISTANT PROFESSORS
Wesley E. Fasnacht, B.S., M.S.
Robert L. Snyder, B.S., M.A.
Mark F. Wiener, B.S., A.M.

The Department of Mathematics offers the Master of Arts degree with options in pure mathematics or mathematics education. The former provides the foundation for continued work in mathematics leading to the Ph.D. degree in pure mathematics. The latter is primarily directed to teachers of mathematics who wish to strengthen their background in mathematics education; in addition, it provides the foundation for the Doctor of Arts or the Ph.D. degree in mathematics education. The department also offers the Master of Education degree in mathematics. This degree enriches academic preparation for teaching at the pre-college level.

ADMISSION TO THE M.A. PROGRAM

In addition to meeting the basic admission requirements of the College, applicants–prior to enrollment–must schedule an interview with the department chairman. Applicants must present a minimum of 30 semester hours of mathematics including a full treatment of calculus and at least one advanced undergraduate course in modern algebra and one in advanced calculus. Deficiencies in these areas may be removed by successfully completing Mat 512–Modern Algebra and/or Mat 541–Advanced Calculus. At the discretion of the department, Graduate Record Examinations may be required.

ADMISSION TO THE M.Ed. PROGRAM

In addition to meeting the basic admission requirements of the College, applicants–prior to enrollment–must schedule an interview with the department chairman. Applicants must present a minimum of 24 semester hours of mathematics including a full treatment of

calculus and at least one advanced undergraduate course in modern algebra or advanced calculus. Deficiencies in these areas may be removed by successfully completing Mat 512–Modern Algebra I or Mat 541–Advanced Calculus.

REQUIREMENTS FOR THE M.A. DEGREE

1. Satisfactory completion of the curriculum outlined below.
2. Successful completion of a comprehensive oral examination.

REQUIREMENTS FOR THE M.Ed. DEGREE

1. Satisfactory completion of the curriculum outlined below.
2. Successful completion of a comprehensive oral examination.

MASTER OF ARTS IN MATHEMATICS
(30 Semester Hours)

		Semester Hours	
I	CORE COURSES (required of all candidates)		12
	Mat 515 Algebra I	3	
	Mat 535 Topology	3	
	Mat 545 Real Analysis I	3	
	Mat 565 Complex Analysis I	3	
II	REQUIRED COURSES		9
	A. Pure Mathematics Option		
	Mat 516 Algebra II	3	
	Mat 536 Algebraic Topology	3	
	Mat 546 Real Analysis II	3	
	or		
	B. Mathematics Education Option		
	A geometry course chosen under advisement	3	
	Mat 507 Current Trends in Teaching Mathematics	3	
	One of the following	3	
	Mat 508 Topics in Mathematics Education		
	Mat 509 Seminar in Mathematics Education		
III	ELECTIVES		9
	Chosen under advisement from the course offerings below. (Mat 503, 512, and 541; CSc 501, 502, and 550 are not acceptable for the M.A. program without the approval of the department chairman.)		

MASTER OF EDUCATION IN MATHEMATICS
(34 Semester Hours)

			Semester Hours	
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85–School of Education)			10-12
II	AREA OF CONCENTRATION			20-22
	A. Required		12	
	Mat 507 Current Trends in Teaching Mathematics	3		
	Mat 515 Algebra I	3		
	Mat 545 Real Analysis I	3		
	One of the following: Mat 508 Topics in Mathematics Education Mat 509 Seminar in Mathematics Education	3		
	B. Electives (under advisement) from the course offerings shown below		8-10	
III	ELECTIVES (Professional or Academic)			0-4

OFFERINGS IN MATHEMATICS

Symbol: Mat

500 Methods and Materials of Research in Mathematics Education (2)

Techniques of research in mathematics education. Analysis of types of research; selection of a problem; formulation of a plan of investigation and report.

501 Fundamental Concepts of Mathematics I (3)

Selected topics which reflect the spirit of the modern mathematics currently taught in the elementary school. PREREQ: a one-semester undergraduate course in modern mathematics.

502 Fundamental Concepts of Mathematics II (3)

Topics selected by mutual decision of students and professor on the basis of the experience in Mat 501. PREREQ: Mat 501.

503 History of Mathematics (3)

Development of mathematics from prehistoric time to present. Emphasis on changes in the mainstreams of mathematical thought through the ages.

506 Fundamentals of Mathematics for Physics (3)

A critical examination of mathematics from the viewpoint of its physical applications.

507 Current Trends in Teaching Mathematics (3)

Philosophy, techniques, subject matter, and effectiveness of current secondary-school mathematics courses, examined against the changing character of American society and technology.

508 Topics in Mathematics Education (3)

Topics announced in advance. Typical topics include: teaching mathematics to the slow learner, methods of research in mathematics education, mathematics laboratories, and individualized instruction.

509 Seminar in Mathematics Education (3)

Topics depend upon student interest. Student presentations required; informal discussion encouraged. Guests, including secondary school principals and mathematics curriculum coordinators, frequently participate.

510 Algebra for the Elementary Teacher (3)

An introduction to modern algebra. Topics include a comparative study of mathematical systems.

512 Modern Algebra (3)

For students with background deficiencies in algebra. Abstract mathematical systems studied include groups, rings, and fields.

513 Linear Algebra (3)

Vectors, vector spaces, determinants, linear transformations, matrices, bilinear and quadratic forms. PREREQ: Mat 512 or equivalent.

514 Theory of Numbers (3)

Elementary number theory and selected topics in analytic number theory.

515 Algebra I (3)

Elements of abstract algebra. Groups, commutative ring theory, modules, and associative algebras over commutative rings. PREREQ: Mat 512 or equivalent.

516 Algebra II (3)

A continuation of Mat 515. Vector spaces, representation theory, and Galois theory. PREREQ: Mat 515.

517 Topics in Algebra (3)

Advanced algebraic theories. Homological algebra, algebraic geometry, and algebraic number theory. PREREQ: Mat 516.

521 Statistics I (3)

For non-mathematics majors. Emphasis on applications to education, psychology, and the sciences. Distributions, measures of central tendency and variability, correlation, regression and hypothesis testing, other topics.

522 Statistics II (3)

Continuation of Mat 521. Applications of distributions, analysis of variance and covariance, multivariate analysis. PREREQ: Mat 521.

523 Mathematical Statistics I (3)

A rigorous treatment of probability spaces and an introduction to the estimation of parameters.

524 Mathematical Statistics II (3)

Continuation of Mat 523. Correlation, sampling, tests of significance, analysis of variance, other topics. PREREQ: Mat 523.

525 Probability (3)

An advanced approach to the elements of probability. Discrete and continuous random variables, probability distributions, sampling distributions.

530 Geometry for the Elementary Teacher (3)

Basic concepts in geometry. Euclidean geometry and postulative systems. PREREQ: Mat 501 or equivalent.

532 Modern Geometry (3)

Foundations of geometry. Axiomatics and the structure of a geometric system. Euclidean geometry from the standpoint of the Euclid and Hilbert postulates. Certain topics in projective and hyperbolic geometry.

533 Projective Geometry (3)

An algebraic approach to projective geometry. Invariant theory, projective spaces, conics and quadratic forms, subgeometries of real projective geometry.

534 Differential Geometry (3)

Modern differential geometry. Calculus on Euclidian space, frame fields, calculus on manifolds, shape operators, Riemannian geometry.

535 Topology (3)

Filters, nets, separation axioms, compactness, connectedness, uniform spaces.

536 Algebraic Topology (3)

Algebraic topological invariants. Homotopy theory; simplicial, singular and Cech homology; cohomology theories. PREREQ: Mat 516, Mat 535.

537 Topics in Topology (3)

Special topics in topology. Dimension theory, topological groups, Lie groups, and differential topology.

541 Advanced Calculus (3)

For students with background deficiencies in analysis. Ordinary and uniform limits; sequences of functions; the Riemann integral.

543 Topics in Differential Equations (3)
Advanced topics. Existence and uniqueness theorems, stability theory, singular points, regular singular points, Sturm separation theorem, and the "method of Liapunov."

545 Real Analysis I (3)
A rigorous study of real valued functions of real variables. PREREQ: Mat 541 or equivalent.

546 Real Analysis II (3)
Continuation of Mat 545. PREREQ: Mat 545.

547 Topics in Analysis (3)
Advanced topics selected on the basis of professor and student interests. PREREQ: Mat 546.

550 Modern Techniques of Teaching Secondary School Mathematics (2)
Analysis of content, philosophy, and objectives of modern courses of study. Motivation, teaching techniques, and materials stressed.

551 Secondary School Mathematics for the Low Achiever (2)
Development of materials and techniques for teaching low achievers.

552 Materials for Teaching Secondary School Mathematics (2)
Examination of available commercial materials. Creating new materials for specific concepts. Includes models for teacher and student use.

555 Modern Techniques of Teaching Elementary School Mathematics (2)
Methods of presenting the new mathematics curricula in the elementary grades. PREREQ: Mat 501 or equivalent.

556 Development of Mathematics Curricula in the Elementary Grades (2)
For the key teacher or coordinator in the modern elementary-school mathematics program. Curriculum development, articulation with the secondary mathematics program, testing programs. PREREQ: Mat 501 or equivalent.

565 Complex Analysis I (3)
A rigorous study of complex valued functions of complex variables.

566 Complex Analysis II (3)
Continuation of Mat 565. PREREQ: Mat 565.

570 Mathematical Models in the Life, Physical, and Social Sciences (3)
Techniques and rationales of model building. Applications to the life, physical, and social sciences.

571 Computer Simulation and Test of Hypothesis (3)
Elements of probability and test of hypothesis. Computer simulation of problems from the life, physical, and social sciences.

572 Proseminar (3)
Seminar in generating and solving problems in mathematics.

581 Methods of Applied Mathematics (3)
Vector analysis, complex analysis, Fourier analysis, and Sturm-Liouville Theory.

583 Operations Research and Applied Mathematics (3)
Topics in applied mathematics. Linear and dynamic programming, game theory, extreme value problems, inventory, allocation, and queuing and search problems.

590 Seminar in Mathematics (3)
Topics selected from student and professor interests. PREREQ: consent of instructor.

599 Independent Study (1-3)

610 Thesis (6)

COMPUTER SCIENCE

Symbol: CSc

501 Introduction to Computer Programming (3)
Primarily for non-mathematics majors. Nature, theory, and use of computers. Programming and applications.

502 Computer Languages (3)
A study of commonly used languages including FORTRAN and COBOL. PREREQ: CSc 501 or equivalent.

503 Systems Analysis (3)
A concentrated course in the design theory, and study of business and educational automated systems. Analysis of system inputs and outputs will be studied. PREREQ: CSc 502.

510 Computer Programming and Numerical Methods (3)
Algorithmic methods. The computer is used to solve a variety of numerical and non-numerical problems. PREREQ: CSc 501 or equivalent and one year of calculus.

550 Seminar in the Teaching of Computing in the High School (2)
Presents examples of courses involving computing in the high school. Outside resource people, audio-visual aids, library materials and available textbooks will be presented. PREREQ: CSc 501 or equivalent.

SERVICE COURSES IN MATHEMATICS

Mat	501	Fundamental Concepts of Mathematics I
Mat	502	Fundamental Concepts of Mathematics II
Mat	506	Fundamentals of Mathematics for Physics
Mat	510	Foundations of Algebra
Mat	521	Statistics I
Mat	522	Statistics II
Mat	530	Geometry for the Elementary Teacher
Mat	555	Modern Techniques of Teaching Elementary School Mathematics
Mat	556	Development of Mathematics Curricula in the Elementary Grades
CSc	501	Introduction to Computer Programming

Physics
Physical Science

Dr. Yarosewick, Chairman

Dr. Shoaf, Coordinator

PROFESSORS

Russell K. Rickert, B.S., M.S., Ed.D.
Mary L. Shoaf, B.A., M.S., Ph.D.
Stanley J. Yarosewick, B.S., M.S., Ph.D.

ASSOCIATE PROFESSORS

Robert W. Hawkes, B.S., M.S.
Brent Kaplan, B.M.E., M.M.E.
Harold L. Skelton, B.S., M.S.
Frank A. Smith, B.S., M.A., Ed.D.

The Department of Physics offers a program leading to the Master of Education in physical science. This program is designed primarily for secondary school teachers of physics, physical science, and general science. Its flexibility allows for the diverse backgrounds and experiences of secondary school teachers yet meets the demands of their present needs and aspirations. The candidate who successfully completes this program acquires a depth in a particular scientific discipline as well as a breadth of knowledge which enables him to teach competently in the related science areas.

ADMISSION TO THE PROGRAM

In addition to meeting the general requirements for admission to a degree program at West Chester, applicants must have a bachelor's degree in science or in science education. Applicants who have a bachelor's degree in a non-science discipline are also eligible, if they can demonstrate to a committee of science faculty that they have a need for, and the ability to successfully complete, this program.

MASTER OF EDUCATION IN PHYSICAL SCIENCE
(34 Semester Hours)

		Semester Hours	
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85—School of Education)		10-12
II	AREA OF CONCENTRATION		20-22
	A. Required	15	
	ScE 500 Modern Trends in Science Education	3	
	Physics Concentration		
	Mat 506 Fundamentals of Mathematics for Physics (Phy 515 may be substituted for Mat 506 at the department chairman's discretion.)	3	
	Phy 502 Principles of Physics I	3	
	Phy 503 Principles of Physics II	3	
	Phy 504 Physics Laboratory	3	
	B. Electives, under advisement from the offerings below (Supporting electives may also be taken in chemistry and mathematics, as advised.)	5-7	
III	ELECTIVES (Professional or Academic)		0-4

OFFERINGS IN PHYSICS

Phy 502 Principles of Physics I (3)
Consideration of topics from the various branches of physics and the treatment of these topics in depth, stressing their interconnection and beauty.

Phy 503 Principles of Physics II (3)
An extension of Phy 502.

Phy 504 Physics Laboratory (3)
Experience with basic laboratory systems.

Phy 505 Modern Trends in Teaching Physics (2)
Philosophy, techniques, subject matter, and effectiveness of current secondary-school physics courses.

Phy 513 Analytical Dynamics (3)

Wave propagation; Lagrange's equations and Hamilton's principle; rigid body motion; special relativity.

Phy 514 Heat and Thermodynamics (3)

Equations of state; first and second laws of thermodynamics; ideal and real gases; entropy; statistical mechanics.

Phy 515 Mathematical Physics I (3)

Topics of mathematics applied to problems in physics. Topics include ordinary differential equations, complex variables and hyperbolic functions, vector calculus, and numerical analysis.

Phy 516 Mathematical Physics II (3)

Topics of mathematics applied to problems in physics. Topics include matrix algebra, Fourier's series, harmonic analysis, eigenvalues and eigenfunctions, and partial differential equations.

Phy 523 Electronics (4)

Laboratory-oriented course. Electron emission, rectification, voltage and power amplification, oscillators, and test circuits. Vacuum tubes and solid state circuits. One hour lecture and 6 hours lab.

Phy 532 Nuclear Physics (3)

Basic nuclear properties, nuclear structure, alpha and beta decay, gamma radiation, nuclear reactions, particle accelerators, detection equipment, and elementary particles.

Phy 533 Nuclear Physics Laboratory (1)

Ordinarily accompanies Phy 532. Preparation and handling of radioactive samples and examination of nuclear decay characteristics and reactions. (Phy 533 may be elected without concurrent enrollment in Phy 532 upon approval by the instructor.)

Phy 541 Special Topics in Physics (1)

Consideration of special developments in physics and their scientific, social, and economic implications.

Phy 591 Seminar (1)

Phy 600 Research (1)

OFFERINGS IN PHYSICAL SCIENCE

PhS 502 Modern Trends in Teaching Physical Science (3)
Materials and techniques in secondary-school physical science.

PhS 504 Foundations of Physics (3)
Introduction to classical physics; vectors, mechanics, waves.

PhS 505 Modern Concepts in Physics (3)
Introduction to electricity and magnetism, the nature of radiation, quantum and atomic physics, radioactivity. PREREQ: PhS 504 or equivalent.

PhS 506 Seminar in Physical Science (1)
Topics depend on backgrounds and interests of the students. PREREQ: 3 graduate courses in physical science.

PhS 507 Modern Trends in Physical Science (3)
Recent developments in physical science and their relation to secondary school science. Topics depend on backgrounds and needs of students.

PhS 510 Electronics for Teachers (3)
Electronic circuits are analyzed, constructed, and tested. PREREQ: general physics.

PhS 511 Electricity for Teachers (3)
Analysis of the principles of electricity and electromagnetism. PREREQ: differential and integral calculus, general physics.

PhS 512 Mechanics for Teachers (3)
Mathematical analysis of dynamics and statics. PREREQ: differential and integral calculus, general physics.

PhS 513 Modern Physics for Teachers (3)
Twentieth-century contributions and ideas, including special relativity, quantum theory, atomic structure, solid state structure. PREREQ: general physics.

PhS 524 Experimental Physics (1-3)
Experiments in modern and atomic physics, selected to suit backgrounds and interests of the students. PREREQ: atomic or modern physics.

PhS 570 Chemistry for the Elementary Teacher (3)
Basic concepts in chemistry and their application to the elementary school program.

PhS 571 Physics for the Elementary Teacher (4)
A study of topics in physics selected for their applicability to the elementary school curriculum. Topics include crystals and crystal growing, light, motion, heat, and electricity.

PhS 590 **History of the Physical Sciences (3)**
From Aristotelian concepts to modern scientific concepts.

OFFERINGS IN SCIENCE EDUCATION

ScE 500 **Modern Trends in Science Education (3)**
Introduction to current research in science education; a critical review of the literature.

ScE 520 **New Trends in the Elementary School Science Curriculum (3)**
New developments in the elementary-school science curriculum for in-service elementary school teachers and administrators.

ScE 523 **Instructional Materials in Elementary Science (3)**
Acquaints elementary school teachers and administrators with instructional materials which will enhance the elementary-school science program.

ScE 595 **Elementary School Science Instruction (3)**
A course designed to improve the science backgrounds of in-service elementary-school teachers and administrators through an investigation of selected science topics.

ScE 596 **Workshop in Elementary School Science Instruction (3)**
An in-depth study of AAAS program, ESS program, SCIS program or other innovative science programs for the elementary school. Especially suitable for teachers who will be using the program. The program studied depends upon needs of teacher participants.

SCIENCE

Sci 522 **Philosophy of Science (also Phi 522) (3)**
See Phi 522 for description.

School of Social and Behavioral Sciences

Byron Y. Fleck, *Dean*

Department of Business and Economics
Department of Geography
Department of History
Department of Political Science
Department of Psychology
Department of Sociology and Anthropology

Degree Programs Offered:

Master of Arts in Geography
Master of Arts in History
Master of Arts in Psychology
Master of Education in Geography
Master of Education in Social Science

The School of Social and Behavioral Sciences offers programs leading to the Master of Arts degree in geography, history, and psychology and, in cooperation with the School of Education, to the Master of Education degree in geography and the Master of Education in social science.

The Graduate Record Examination is required for admission and diagnostic purposes in all of these degree programs.

The Master of Education degrees in geography and social science are 34-hour programs with 10 to 12 hours of Professional Education, 20 to 22 hours in Subject Matter Concentration, and 0-4 elective hours in either Subject Matter or Professional Education courses.

MASTER OF ARTS IN GEOGRAPHY
(33 Semester Hours)

Dr. Keinard, Chairman, Department of Geography

Dr. Langdon, Coordinator for the Graduate Programs in Geography

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PROFESSORS
Alvin S. Keinard, B.A., M.Ed., Ed.D.
George Langdon, B.S., M.S., Ph.D.

ASSOCIATE PROFESSORS
Floyd R. Bielski, B.S., M.A.
Charles W. Grassel, B.S., M.S.
Arthur S. Hawthorne, B.S., M.A.
William J. Rampon, B.A., M.A.
John C. Tachovsky, B.S., M.Ed.
Andrew R. Thompson, B.S., M.Ed.

			Semester Hours
I	REQUIRED COURSES		15
	Geo 500 Methods and Materials of Geographic Research	3	
	Geo 503 Advanced Climatology	3	
	Geo 505 Advanced Cartography	3	
	Geo 581 Seminar in Modern Philosophy of Geography	3	
	Geo 585 Geography Field Methods	3	
II	THESIS		6
	Geo 610 Thesis	6	
III	LANGUAGE OR STATISTICS		0
	The candidate must pass either a reading proficiency test in French, German, or Spanish, *or* a course in advanced statistics.		
IV	ELECTIVES		12
	Chosen under advisement from the geography offerings shown below. With departmental approval, electives may also be chosen from geology and/or anthropology.		

OFFERINGS IN GEOGRAPHY

Symbol: Geo

500 Methods and Materials of Geographic Research (3)
Sources of geographic information and methods of compiling it into reports and geographic writing. An outline for either a thesis or a research report is prepared.

501 Advanced Geomorphology (3)

Landform structures and processes which brought them about. Interpreting landforms in relation to cultural geography with topographic maps and aerial photographs.

502 Regional Geomorphology of North America (3)

Geological analysis of surface configurations of North America, with emphasis on geographical relationships to these features. PREREQ: introductory geology or geomorphology.

503 General Climatology (3)

Meteorological factors influencing climates of the world and their general patterns. Survey of world climates.

504 Climatology of the Continents (3)

The earth climates are examined on a continental basis, with emphasis on problem climates that deviate from the normal pattern.

505 Advanced Cartography (3)

Cartographic methods and techniques. Presentation of statistical data in map form. PREREQ: introductory cartography or consent of instructor.

506 Advanced Physical Geography (3)

Basic aspects of physical geography in the total geographic concept.

507 Advanced Map Interpretation (3)

Designed to improve map-reading skills. Emphasis on increased understanding of U.S.G.S. quadrangles and special-purpose statistical maps.

520 Problems of Economic Geography (3)

Economic situations in our country and the world. Major problems of production, surplus, marketing, conflicting national policies, special problem areas. Problems in gathering, presenting, and comparing economic data.

521 World Economic Patterns (3)

An examination of questions relating to distribution and interaction of world economic activity. A theoretical framework is explored and methodology discussed. Empirical examinations are made.

522 Agricultural Geography (3)

Significant factors affecting the agricultural picture of today's world. Major world crops.

524 Geography of Population (3)

Characteristics and distribution of the world's population are studied.

525 Geography of Regional Planning (3)

Significance of regional planning in solving man's problems. Attention given to regional planning projects in the area.

526 Urban Geography (3)

Theoretical foundation for urban development is examined. Economic structure, systems of classification, and shape-point analysis methods for urban analysis.

527 Political and Global Concepts in Geography (3)

Development of world political patterns. Factors affecting present trends in global concepts.

529 Geographic Influences in World History (3)

Effect of geographic factors upon selected movements, occurrences, eras, and cultural groups in modern world history.

540 Geography of the United States (3)

A regional study of the United States, emphasizing relationships between physical geography and man's economic and political responses to environmental circumstances.

541 Geography of the United States in its World Relations (3)

The interdependence of our country in the world of nations. Changing United States patterns in relation to economic, strategic, and political developments in other parts of the world. PREREQ: world geography.

542 Geography of Canada (3)

Physical and cultural regionalism of Canada. The natural resources; patterns of human occupance including agriculture, industry, and transportation.

543 Geography of Mexico and Middle America (3)

Regional geography of Mexico, Central America, and the West Indies. Political divisions and their present-day aspects in relation to geographic conditions. Inter-American affairs considered.

544 Geography of South America (3)

Regional geography of South America: its physical base, settlement, agriculture, mining, and manufacturing. Inter-American relations included.

545 Geography of Europe (Excluding the U.S.S.R.) (3)

Regional study of Europe. Influence of environmental factors such as climate, landforms, and soils on the economic, social, and political progress of Europe's nations.

546 Geography of the Soviet Union (3)

European and Asiatic U.S.S.R. and its satellite nations. Elements of the environment and regional divisions studied in relation to the resource base and economic and political aims. Positive and negative factors of the U.S.S.R.

547 Geography of Asia (Excluding the U.S.S.R.) (3)

Physical and cultural aspects of the geography of contemporaneous East Asia and Southwest Asia, including the Monsoon Realm.

549 Geography of Africa (3)

Survey of the continent as a whole and analysis of the major problems faced by newly created African nations.

571 Advanced Conservation of Natural Resources (3)

An economic and geographic appraisal of resource conservation in the United States, with emphasis on resource management in regional planning. The summer offering of this course is sometimes a workshop.

572 Seminar in Resource Management (3)

Research problems in resource management, done on an individual-student or team-study basis.

580 Seminar in Geography in Education (3)

The changing role and function of geographic education in American schools. The relationship of geographic study to other curricula.

581 Seminar in Modern Philosophy of Geography (3)

Modern geographic thought, with emphasis on contributions of American geographers and their most recent views.

582 Seminar in Specialized Studies (3)

A specialized phase of geography, selected to meet a specific need of geography majors. To be taught by a specialist in the selected area.

584 Modern Techniques of Teaching Geography (3)

Contemporary methods and resources for the formulation, organization, presentation, and evaluation of geography lessons.

585 Geography Field Methods (3)

An advanced field course which includes urban and land-use studies. Field methods; mapping; translating field-study findings into geographical reports.

587 Geography Workshop for Teachers (3)

A combination of research, field work, teaching procedures, and group studies in one or several phases of geography.

590 Independent Studies in Geography (1-3)

Research projects, reports, readings in geography. PREREQ: approval of department chairman.

591-594 Area Field Studies (3 s.h. for each study)

A specific geographic region or area in either the United States or a foreign country is selected for field study in each course. The specific course number is assigned as new areas of study are announced. The series includes:

Geo 591–Field Study (Local)
Geo 592–Field Study (Puerto Rico)
Geo 593–Field Study (Europe)
Geo 594–Field Study (Jamaica)

600 Research Report (2)

Experience in research techniques and methods of reporting findings.

610 Thesis (3 or 6)

A thesis is built around a research problem for which the student develops a theory or proposition and investigates available information on the subject.

MASTER OF ARTS IN HISTORY
(30 Semester Hours)

Dr. Johnson, Chairman, Department of History
Dr. Carlson, Coordinator for the Graduate Programs in History

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PROFESSORS
Robert E. Carlson, B.A., M.A., Ph.D.
Florence Joseph Crowley, B.A., M.A., Ph.D.
Edward G. Everett, B.S., M.A., Ph.D.
Byron Y. Fleck, B.A., M.A., Ph.D.
Claude R. Foster Jr., B.A., M.A., Th.M., Ph.D.
Frank Fox, B.S., M.A., Ph.D.
Clifford H. Harding, B.A., M.A., Ph.D.
Patricia C. Johnson, B.A., Ph.D.
Donn C. Riley, A.B., M.A., Ph.D.
Harry G. Schalck, A.B., M.A., Ph.D.
Norbert C. Soldon, B.A., M.A., Ph.D.
Charles H. Stuart, B.A., M.A., Ph.D.
Jane B. Swan, B.A., M.A., Ph.D.
John J. Turner, Jr., A.B., M.A., Ph.D.
Robert J. Young, B.S., M.A., Ph.D.

ASSOCIATE PROFESSORS
Raymond A. Doyle, B.S.
Clifton E. Morgan, B.S., M.A.
Anne Sessa, B.A., Ph.D.
Harold E. Shaffer, A.B., Litt.M.
Richard J. Webster, A.B., M.A., A.M.

ASSISTANT PROFESSOR
Howard James Burgwin, Jr., B.A., M.A., Ph.D

The Master of Arts degree in history provides a sound foundation for study leading to the doctorate in history as well as a background of knowledge for teachers in secondary schools and institutions of higher learning and for persons

employed in industry and government. The degree also enriches the student's cultural background and helps him to evaluate present events in light of the past.

The M.A. in history may be achieved by completing either a thesis or non-thesis program. The candidate in the thesis program must pass a reading-proficiency test in either French or German. The candidate, with the department chairman's approval, may substitute another language or may demonstrate competency in statistics. In the non-thesis program, the candidate does not fulfill the language requirement but takes three seminar courses and presents a research paper in each.

	Semester Hours	
REQUIRED AREA		18
Major history concentration (American or European)	12	
Minor History concentration (Either in area not selected for concentration or in Third World)	6	
ELECTIVE AREA		
Thesis Option		12
His 610 Thesis	6	
SSc 500 Methods and Materials of Research	3	
Electives, under advisement	3	
Non-Thesis Option		12
SSc 500 Methods and Materials of Research	3	
His 550 or His 551 (Major-field seminars with research papers)	6	
His 550 or His 551 (Minor-field seminar with research paper)	3	

COURSE SELECTIONS

Group I—American

His	508	Colonial America: 1607-1763
His	509	Revolutionary America: 1763-1789
His	511	Rise of the New Nation: 1789-1850
His	512	Civil War and Reconstruction: 1850-1877
His	513	Emergence of Modern America: 1876-1923
His	514	America Since 1919
His	515	Problems in American Constitutional Development

Group II—European

His	530	Problems in Medieval Civilization
His	531	The Renaissance
His	532	The Reformation
His	533	Dynastic Europe: 1648-1789
His	534	The French Revolution and the Napoleonic Era: 1789-1815
His	535	Nationalism and Democracy: 1815-1914
His	536	Europe Since 1914
His	540	The Evolution of Modern Russia

(both columns continued on next page)

His	516	Recent American Diplomatic History	His	541	Tudor and Stuart England
His	550	Seminar in American History	His	551	Seminar in European History

Electives

Geo	527	Political and Global Concepts in Geography	His	527	Studies in the History and Culture of Emerging Africa
Geo	529	Geographic Influences in World History	His	590	Independent Studies in History
His	521	The Cultural and Intellectual History of Latin America	PSc	531	Modern Political Theory
His	524	Studies in the History and Culture of South Asia	PSc	532	Seminar in International Relations
His	525	Studies in the History and Culture of East Asia	PSc	533	The American Legislative Process
			PSc	540	Democracy and Totalitarianism
			Soc	532	Historical Sociology

OFFERINGS IN HISTORY

See also Social Science (SSc) following History

Symbol: His

508 Colonial America: 1607-1763 (3)

Development of the 13 mainland colonies of Anglo-America from their settlement to mid-18th century. Emphasis on a conceptual analysis of specific events and problems.

509 Revolutionary America: 1763-1789 (3)

American development from the mid-18th century to the framing of the Constitution, with emphasis on the causes of the American Revolution and the evolution of American institutions and ideas throughout the period.

511 The Rise of the New Nation: 1789-1850 (3)

An historiographical approach involving interpretations of the foundations and development of the Federalist Party, emergence of Jeffersonian Democracy, evolution of Jacksonian Democracy, and events of the Middle Period leading to the decade of controversy.

512 Civil War and Reconstruction: 1850-1877 (3)

The War and its aftermath as the great watershed of United States national history. Emphasis on the conflicting interpretations of the causes, nature, and effects of the Civil War.

513 Emergence of Modern America: 1876-1923 (3)

Rise of industry, labor, immigration, and new cultural patterns; emergence of new political alignments, rise of imperialism, development of liberalism and reform; America's struggle for neutrality and her participation in World War I.

514 America Since 1919 (3)

The impact of urbanization and industrialization upon society, politics, and economics; the problems of wars–declared and undeclared–and the various policies for peace.

515 Problems in American Constitutional Development (3)

Selected problems in the development of American constitutional government. The progressive adaptation of the law to a changing social and economic order. Conflicts such as nationalism versus states' rights and vested rights versus police power.

516 Recent American Diplomatic History (3)

American foreign policy in Europe, Asia, Latin America, and the Middle East from 1945 to the present. Objectives sought by the United States and the political, military, economic, and social policies pursued; role of the United States in the future of underdeveloped countries.

521 The Cultural and Intellectual History of Latin America (3)

Pre-Columbian art and thought, scholasticism, mercantilism, the Great Debate, Baroque architecture, Enlightenment, conservatism, liberalism, Romanticism, Modernism, Positivism, Jose Enrique Rodo, Aprismo, Mexican muralists, novel of social protest, existentialism, and music. Lineaments of the Latin-American mind.

524 Studies in the History and Culture of South Asia (3)

The Indian sub-continent's dominant political, cultural, and economic institutions. Features which contribute to an understanding of modern India and Pakistan.

525 Studies in the History and Culture of East Asia (3)

The traditional basis for modern Chinese, Japanese, and Korean society. The interaction between European and Asian cultures and resulting changes in East Asia.

526 Workshop in World Cultures (3)

A workshop for in-service teachers of World Cultures in Pennsylvania's secondary schools. Western and non-Western cultures; resource persons; research in recent reference materials; consultation with representatives of cultural regions.

527 Studies in the History and Culture of Emerging Africa (3)

Emergence of modern African nationalism against the background of traditional African society and the legacy of European colonialism.

530 Problems in Medieval Civilization (3)

Rise and fall of the Byzantine Empire, conquests of the Arabs and Turks, the crusades for the recovery of the Holy Land; the religious orders and the universal aspirations of the Papacy.

531 The Renaissance (3)

Political, social, and cultural transitions in Italy and Northern Europe, 1350-1550.

532 The Reformation (3)

Major and minor Protestant leaders and their movements; effects on the evolving nation-states; the Church of Rome's response; Wars of Religion and Treaty of Westphalia; the Scientific Revolution.

533 Dynastic Europe: 1648-1789 (3)

The absolute dynastic monarchy as best exemplified by France, Prussia, and Russia; the middle-class challenge as typified by the English experience; the Enlightenment and the New Science; capitalism; colonialism, and the wars of empire.

534 The French Revolution and the Napoleonic Era: 1789-1815 (3)

Causes of the French Revolution, failure of Absolutism, Reign of Terror, the Directory; rise of Napoleon Bonaparte and his contribution to the Revolution; the Empire–its rise and collapse; Congress of Vienna.

535 Nationalism and Democracy: 1815-1914 (3)

Aftermath and effect of the French Revolutionary era; events brought on by the growth of nationalism and democracy; development of the industrial revolution. Roots of the First World War.

536 Europe Since 1914 (3)

Twentieth century Europe, with emphasis on causes of World War I; Europe between World War I and World War II; problems of contemporary Europe.

540 The Evolution of Modern Russia (3)

A cultural approach to the historical development of Russia from the foundation of Kiev to the Revolution of 1917. Emphasis is on Russia's political and aesthetic uniqueness.

541 Tudor and Stuart England (3)

Social, cultural, religious, political, and economic developments during the Tudor and Stuart reigns; building a strong Tudor monarchy; the English Reformation; Stuart Absolutism; Puritan Revolution, Civil War and the Commonwealth; the beginning of Empire; the Restoration, Glorious Revolution, and growth of English constitutionalism.

550 Seminar in American History (3)

Selected problems in American History. Subject announced in advance of each semester. PREREQ: SSc 500, two courses from Group I.

551 Seminar in European History (3)

Selected problems in European History. Subject announced in advance of each semester. PREREQ: SSc 500, two courses from Group II.

590 Independent Studies in History (1-3)
Research projects, reports, and readings in history. PREREQ: approval of department chairman.

610 Thesis (6)

SOCIAL SCIENCE

SSc 500 Methods and Materials of Research in the Social Sciences (3)
Basic techniques and procedures in research; major types of research and methods for locating, evaluating, and interpreting evidence. The student develops a tentative outline, bibliography, and summary of an investigative procedure.

SSc 502 Methods and Materials for Teaching Social Studies (3)
Current practices and procedures; organization and planning; the use of classroom, library, and curriculum materials; testing, measurement, and evaluation; bibliographical sources for both teachers and students.

SSc 580 Ethnic Cultures Institute (3)
Jointly sponsored by the Schools of Arts and Letters and Social and Behavioral Sciences, the Institute considers the contributions of ethnic groups to the culture of the United States. Designed primarily for teachers, community action personnel, and students who wish to increase knowledge and skills for developing meaningful intergroup relationships and improving classroom instruction. Educators and community leaders take part.

SSc 600 Research Report (2)

SSc 610 Thesis (3)

MASTER OF ARTS IN PSYCHOLOGY
(33 Semester Hours)

Dr. Clark, Chairman, Department of Psychology

Dr. Sands, Coordinator for the Graduate Program in Psychology

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PROFESSORS
Jay L. Clark, B.A., M.A., Ph.D.
Ruth C. Feldman, B.A., M.A., M.S.S., Ed.D.
Catherine E. Gregg, B.A., M.A., Ph.D.
Martin J. Higgins, B.S., M.A., Ph.D.
Jack Porter, B.S., M.Ed., Ed.D.
Harold R. Sands, B.A., M.Ed., Ph.D.

ASSOCIATE PROFESSORS
Elise Bartholomew, B.A., M.A., Ph.D.
Kenneth L. Jackman, B.A., M.S., Ph.D.
Walena C. Morse, A.B., M.A., Ph.D.
Robert R. Shinehouse, B.A., M.A.

		Semester Hours	
I	REQUIRED COURSES IN PSYCHOLOGY		14
	Psy 500 Methods and Materials of Research in Psychology	3	
	Psy 501 Introductory Statistics for the Behavioral Sciences	2	
	Psy 505 Advanced General Psychology	3	
	Psy 506 Theories of Learning	3	
	Psy 512 Psychology of Personality	3	
II	RESEARCH		2-3
	Psy 600 Research Report	2	
	or		
	Psy 610 Thesis	3	
III	ELECTIVES		16-17
	Electives in psychology, chosen under advisement from psychology offerings shown below	10-11	
	Free electives (chosen from the offerings of any School, with departmental approval)	6	

OFFERINGS IN PSYCHOLOGY

Symbol: Psy

500 Methods and Materials of Research in Psychology (3)

The logic of scientific behavioral research with stress on hypothesis and problem development, data collection, measurement problems, research designs, and interpretation.

501 Introductory Statistics for the Behavioral Sciences (2)

Central tendency, variability, standard scores, correlation, probability, sampling, tests of hypotheses, "t" test, chi square, distribution-free statistics, introduction to analysis of variance.

502 Advanced Statistics for the Behavioral Sciences (2)

Special correlational methods, analysis of variance, and analysis of covariance. PREREQ: Psy 501.

505 Advanced General Psychology (3)

Lectures and readings for a deeper understanding of human behavior through intensive consideration of learning, memory, cognitive processes, motivation, emotion, human development, personality, and group processes.

506 Theories of Learning (3)

Survey and critical review of existing theories of learning and the relevant research data.

507 Advanced Child Psychology (3)

Research findings and theoretical issues during the period from birth to pubescence with emphasis on cognitive development, learning, motivation, emotional development, socialization, perception, and biogenic factors.

508 Advanced Adolescent Psychology (3)

The psychodynamics of age 12-21 and the effects of this period on social and educational growth. Such processes as physiological changes, personality development, learning, and psychosexual development are considered.

509 Advanced Social Psychology (3)

Current problems and research with emphasis on application and experimental techniques.

512 Psychology of Personality (3)

The interaction and effects of forces which affect personality development. Normal and neurotic development contrasted; principles of personality measurement explored.

517 Introduction to Psychopathology (3)

Advanced study of abnormal development and a description of pertinent types, including symptoms, causes, and treatment. Current and recent theoretical approaches and research findings relevant to the etiology and treatment of these disorders. PREREQ: Psy 375—Abnormal Psychology or equivalent course, or permission of instructor.

524 Psychometrics (3)

A survey of measurement theory in psychology with emphasis on the logic of measurement, scaling models, statistical methods, construction of valid measures. Advanced techniques for assessment of reliability.

529 Advanced Mental Hygiene (3)
Ways of achieving positive mental health, including ways people can improve their mental health through their own efforts.

544 Individual Psychometric Techniques: Wechsler & Binet Scales (4)
Historical development, administration, scoring, and interpretation of the Wechsler and Binet scales. PREREQ: Psy 501 and permission of instructor.

549 Introduction to Projective Techniques and Personality Testing (3)
History and theory of personality testing. Practical applications typical of clinical and educational settings.

550 Seminar in Psychology (2)
Selected problems in psychology. Subject announced in advance of each semester.

559 Advanced Principles of Psychotherapy (3)
Techniques and problems involved in counseling and psychotherapy. PREREQ: Psy 390—Principles of Counseling and Psychotherapy or equivalent course.

590 Independent Studies in Psychology (1-3)
Research projects, reports, readings in psychology. PREREQ: approval of department chairman.

595 Introduction to Clinical Psychology (3)
Major research methods in clinical psychology, theoretical foundations, psychodiagnostic methods, clinical patterns, methods of treatment.

600 Research Report (2)

610 Thesis (3)

MASTER OF EDUCATION IN GEOGRAPHY
(34 Semester Hours)

				Semester Hours
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85—School of Education)			10-12
II	SUBJECT MATTER CONCENTRATION			20-22
	Geo 500 Methods and Materials of Geographic Research		3	
	Geo 584 Modern Techniques of Teaching Geography		3	
	Area of Concentration		14-16	
	(A minimum of one course each from Groups 1, 2, 3)			
	Research	0-5		
	Seminar	3		
	Geo 600 Research Report	2		
III	ELECTIVES (Professional or Academic)			0-4

COURSE SELECTIONS

Group 1. Earth Studies

Geo 501	Advanced Geomorphology	Geo 504	Climatology of the Continents
Geo 502	Regional Geomorphology of North America	Geo 506	Advanced Physical Geography
Geo 503	General Climatology		

Group 2. Cultural Studies

Geo 520	Problems of Economic Geography	Geo 527	Political and Global Concepts in Geography
Geo 521	World Economic Patterns	Geo 529	Geographic Influences in World History
Geo 522	Agricultural Geography	Geo 571	Advanced Conservation of Natural Resources
Geo 524	Geography of Population	Geo 572	Seminar in Resource Management
Geo 525	Geography of Regional Planning		
Geo 526	Urban Geography		

Group 3. Regional Studies

Geo 540	Geography of the United States	Geo 544	Geography of South America
Geo 541	Geography of the United States in its World Relations	Geo 545	Geography of Europe (Excluding the U.S.S.R.)
Geo 542	Geography of Canada	Geo 546	Geography of the Soviet Union
Geo 543	Geography of Mexico and Middle America	Geo 547	Geography of Asia (Excluding the U.S.S.R.)
		Geo 549	Geography of Africa

Group 4. Methods, Techniques, Seminars, and Thesis

Geo 505	Advanced Cartography	Geo 582	Seminar in Specialized Studies
Geo 507	Advanced Map Interpretation	Geo 585	Geography Field Methods
Geo 580	Seminar in Geography in Education	Geo 587	Geography Workshop for Teachers
Geo 581	Seminar in Modern Philosophy of Geography	Geo 590	Independent Studies in Geography
		Geo 591-594	Area Field Studies
		Geo 610	Thesis (3 s.h. in M.Ed. Program)

See Page 150 for Offerings in Geography.

MASTER OF EDUCATION IN SOCIAL SCIENCE
(34 Semester Hours)

The student concentrates in history, political science, psychology, or sociology-anthropology, depending upon his teaching field in the secondary school.

CONCENTRATION: HISTORY

		Semester Hours
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85–School of Education)	10-12
II	SUBJECT MATTER CONCENTRATION	20-22
	SSc 500 Methods and Materials of Research in the Social Sciences	3
	Teaching Field Courses, Groups 1, 2, and 3	15-16
	Research	2-3
	SSc 600 Research Report 2	
	(His 550 or 551 may substitute for SSc 600)	
	SSc 610 Thesis 3	
III	ELECTIVES (Professional or Academic)	0-4

COURSE SELECTIONS

Group 1. American History

His 508 Colonial America: 1607-1763
His 509 Revolutionary America: 1763-1789
His 511 The Rise of the New Nation: 1789-1850
His 512 Civil War and Reconstruction: 1850-1877
His 513 Emergence of Modern America: 1876-1923
His 514 America Since 1919
His 515 Problems in American Constitutional Development
His 516 Recent American Diplomatic History
His 550 Seminar in American History

Group 2. European History

His 530 Problems in Medieval Civilization
His 531 The Renaissance
His 532 The Reformation
His 533 Dynastic Europe: 1648-1789
His 534 The French Revolution and the Napoleonic Era: 1789-1815
His 535 Nationalism and Democracy: 1815-1914
His 536 Europe Since 1914
His 540 The Evolution of Modern Russia
His 541 Tudor and Stuart England
His 551 Seminar in European History

Group 3. World Cultures

His 521	The Cultural and Intellectual History of Latin America	His 526	Workshop in World Cultures
His 524	Studies in the History and Culture of South Asia	His 527	Studies in the History and Culture of Emerging Africa
His 525	Studies in the History and Culture of East Asia		

Special Studies

SSc 502	Methods and Materials for Teaching Social Studies	His 590	Independent Studies in History

See Page 156 for Offerings in History and Social Science.

CONCENTRATION: POLITICAL SCIENCE

Dr. Harding, Chairman, Department of Political Science

PROFESSORS
Thomas J. Brady, B.S., J.D.
Clifford H. Harding, A.B., M.A., Ph.D.
James S. Milne, B.S., M.A., Ph.D.
John C. Shea, B.A., M.A., Ph.D.

ASSOCIATE PROFESSORS
William F. Burns, B.A., M.A.
A. Wayne Burton, B.A., M.A.
David S. Eldredge, B.A., A.M.T., C.A.S.

				Semester Hours
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85—School of Education)			10-12
II	SUBJECT MATTER CONCENTRATION			20-22
	SSc 500 Methods and Materials of Research in the Social Sciences		3	
	Teaching Field Courses		14-17	
	Research		2-3	
	SSc 600 Research Report	2		
	SSc 610 Thesis	3		
III	ELECTIVES (Professional or Academic)			0-4

OFFERINGS IN POLITICAL SCIENCE

Symbol: PSc

531 Modern Political Theory (3)

Critical analysis of enduring political problems, primarily in the writings of political theorists from Machiavelli to the present; basic concepts of political science; theories concerning the proper role of the state in society.

532 Seminar in International Relations (3)

Factors which motivate the actions of nations; machinery which members of the nation-state system have evolved for giving effect to their various policies. Methods of diplomacy, international law, international organization.

533 The American Legislative Process (3)

The legislative process in the United States; executive-legislative relationship; changing role of the legislature in America's balanced government.

540 Democracy and Totalitarianism (3)

Political principles and philosophy underlying democracy and totalitarianism; the modern configuration of these two lines of political thought and practice.

550 Seminar in Political Science (2)

Selected problems in political science. Subject announced in advance of each semester. PREREQ: SSc 500.

590 Independent Studies in Political Science (1-3)

Research projects, reports, and readings in political science. PREREQ: approval of department chairman.

The Department of Political Science offers certain specially designed upper-level undergraduate courses for graduate credit. Interested students should consult the department office for specific courses.

CONCENTRATION: PSYCHOLOGY

			Semester Hours
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85–School of Education)		10-12
II	SUBJECT MATTER CONCENTRATION		20-22
	Psy 500 Methods and Materials of Research in Psychology	3	
	Teaching Field Courses	14-17	
	Research	2-3	
	Psy 600 Research Report	2	
	Psy 610 Thesis	3	
III	ELECTIVES (Professional or Academic)		0-4

See Page 160 for Offerings in Psychology.

CONCENTRATION: SOCIOLOGY-ANTHROPOLOGY

Dr. Samuelson, Chairman, Department of Sociology and Anthropology

---

PROFESSORS
Marshall J. Becker, B.A., M.A., Ph.D.
Glenn W. Samuelson, B.A., M.A.R., M.A., Ed.D.

ASSOCIATE PROFESSOR
Robert T. Constable, A.B., M.S.W., D.S.W.

ASSISTANT PROFESSOR
Harold Bram, B.A., M.A.

			Semester Hours
I	PROFESSIONAL EDUCATION REQUIREMENTS (See Page 85–School of Education)		10-12
II	SUBJECT MATTER CONCENTRATION		20-22
	SSc 500 Methods and Materials of Research in the Social Sciences	3	
	Teaching Field Courses	14-17	
	Research	2-3	
	SSc 600 Research Report	2	
	SSc 610 Thesis	3	
III	ELECTIVES (Professional or Academic)		0-4

OFFERINGS IN SOCIOLOGY AND ANTHROPOLOGY

Soc 531 Social Pathology (3)
Pathological conditions in modern, urbanized-industrialized society; their causes and possible corrections.

Soc 532 Historical Sociology (3)
Social thought from the early Greeks to contemporary times. Contributions of outstanding European and American sociologists to social theory and research.

Soc 533 American Minorities (3)
Racial, cultural, and religious minority groups in America today. Prejudice, discrimination, and possible solutions for majority-minority group tensions are examined.

Soc 550 Seminar in Sociology (3)
Selected problems in sociology. Subject announced in advance of each semester. PREREQ: SSc 500.

Soc 590 Independent Studies in Sociology (1-3)
Research projects, reports, readings in sociology. PREREQ: approval of department chairman.

Ant 530 Problems in Anthropology (3)
Major aspects of physical and cultural anthropology. Emphasis on topics suitable for the elementary and secondary curricula. Some background in anthropology recommended.

Ant 540 Ethnographic Studies (3)
Intensive survey of a single culture area. Description of the cultural ecology and its significance for the rest of the world. Area to be studied announced in advance.

Ant 550 Seminar in Anthropology (3)
Selected problems in anthropology. Subject announced in advance of each semester. PREREQ: SSc 500.

Ant 590 Independent Studies in Anthropology (1-3)
Research projects, reports, and readings in anthropology. PREREQ: approval of department chairman.

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SHARPLESS STREET
SOUTH NEW STREET
RAMSEY HALL
TYSON HALL
GOSNEN HALL
WATER TOWER
BOILER PLANT
LAUNDRY
MAINT. GARAGE
"D" PARKING
PARKING "C"
MAINT. BLDG.
ELECTRIC SUBSTATION
LAWRENCE CNTR.
PARKING
EHINGER GYM
HOLLINGER FIELD HOUSE
SPECIAL EDU. BLDG.
SCHNEVKER SCIENCE CNTR.
PARKING
KILLINGER HALL
Athletic Field
Athletic Field
SANDERSON HALL
SCHMIDT HALL
WAYNE HALL
WC CARTHY HALL
MITCHELL HALL
REYNOLDS HALL
PARKING
SWOPE HALL
COLLEGE AVENUE
ADMINISTRATION BLDG.
PHILIPS MEMORIAL
ANDERSON HALL
MAIN HALL
RECITATION HALL
OLD LIBRARY
FRANCIS HARVEY GREEN LIBRARY
SOUTH CHURCH ST.
EAST NIELDS ST.
"D" PARKING
LINDEN ST.
SOUTH HIGH STREET
SOUTH WALNUT STREET
EAST ROSEDALE AVE
N
LEARNING RESEARCH CENTER
PRESIDENT'S RESIDENCE
CHURCH STREET
NORFOLK AVENUE
STUDENT UNION
PARKING "K"
ROSLYN AVE.
Tennis Courts
PARKING "AF"
TO SOUTH CAMPUS

Communications Directory

The College has direct dialing. For numbers not shown call Information and Assistance: 436-1000 (Area Code 215).

	Office	Building	Telephone 436 plus:
Admissions/Applications/ Catalogues	Graduate Studies	Administration	2243
Books and Student Supplies	College Bookstore	Recitation	2242
Business/Fiscal Matters	Business Affairs	Philips	2212
Counseling	Counseling Center	Ramsey	2611
Cultural Events	Cultural Affairs	Administration	2336
Curricula	Biology	Schmucker	2926
	Chemistry	Schmucker	2631
	Counselor Education	Anderson	2660
	Earth and Space Science	Schmucker	2788
	Educational Research	Learning/Research	2835
	Elementary Education	Anderson	2944
	English	Anderson	2914
	Foreign Languages	Recitation	2372
	Geography	Anderson	2343
	Health/Physical Education	H/PEd Center	2260
	History/Social Science	Schmidt	2996
	Instructional Media Education	Anderson	2233
	Mathematics	Anderson	2440
	Music	Swope	2539
	Philosophy	Old Library	2841
	Physics	Schmucker	2540
	Political Science	Anderson	2746
	Psychology	Anderson	2945
	Reading	809 Roslyn	2861
	Secondary Education	Anderson	2426
	Sociology/Anthropology	Old Library	2657
	Teaching English as a Second Language	110 W. Rosedale	2636
Financial Aid	Financial Aid to Students	Lawrence	2627
Graduate Students' Association	Graduate Office	Administration	2659
Housing	Office of Associate Deans	Ramsey	2537
Infirmary	College Health Service	Reynolds	2509
Library Services	Francis Harvey Green Library		2747
Placement/Career Services	Career Development Center	Reynolds	2501
Research/Related Services	Bureau of Research and Related Services	Learning/Research	2835
Transcripts/Veterans' Affairs	Scheduling and Academic Records	Administration	2337

SCHOOLS (GRADUATE ADMINISTRATION)

Arts and Letters (Anderson)	2914	Music (Swope)	2539
Education (Anderson)	2426	Sciences and Mathematics (Schmucker)	2540
Health and Physical Education (H/PEd Center)	2260	Social and Behavioral Sciences (Anderson)	2930

West Chester State College, West Chester Pennsylvania 19380

A Summer Place . . .

WEST CHESTER STATE COLLEGE

1976 SUMMER GRADUATE COURSES

STRUCTURE OF THE COLLEGE

West Chester State College is divided into six Schools each under the direction of a Dean. Graduate course offerings are divided among the Schools as follows:

School of Arts and Letters

Art
English
Foreign Languages
Philosophy
Speech Communication and Theatre
Speech Pathology and Audiology

School of Education

Counselor Education
Elementary Education
Instructional Media Education
Secondary Education and Professional Studies
Criminal Justice
Educational Research
Reading
Special Education
Urban Education

School of Health and Physical Education

Health Education
Physical Education

School of Music

Music Education
Music History and Literature
Music Theory and Composition
Instrumental Music
Keyboard Music
Vocal and Choral Music

School of Sciences and Mathematics

Biology
Chemistry
Earth Sciences
Mathematical Sciences
Nursing
Physics

School of Social and Behavioral Sciences

Anthropology, Sociology, and Social Welfare
Business and Economics
Geography and Planning
Government and Politics
History
Psychology

For the convenience of readers the arrangement of course offerings is alphabetical by field or area of study.

All correspondence should be directed to

The Graduate Office
Room 205 — Administration Building
West Chester State College
West Chester, Pa. 19380

Telephone: (215) 436-2243

WEST CHESTER STATE COLLEGE
GRADUATE
SUMMER SESSIONS
1976

ACCREDITATION

West Chester State College is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The American Association for Health, Physical Education and Recreation, The National Association of Schools of Music, The Council on Social Work Education and The American Chemical Society. West Chester State College is a member of The Council of Graduate Schools in the United States.

IMPORTANT NOTES

The times and days of classes are subject to change.

Each summer session offering is contingent upon adequate enrollment and the judgment of the College.

This catalog is not to be regarded as an irrevocable contract between the student and West Chester State College.

Admission to summer session classes does not imply admission to graduate programs.

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West Chester State College . . .

. . . a summer place. Located in the beautiful rolling countryside of Chester County within easy commuting distance of the major metropolitan centers of Philadelphia and Wilmington, West Chester has a lot to offer the summer student.

Whatever your reasons for considering summer school . . . accelerating your degree program, personal enrichment, improving grades, change of major, or any of a million and one other possibilities . . . you'll probably find what you're looking for here.

Taking courses needn't interfere with your vacation plans. West Chester's arrangement of a three-week Pre-Session in June, a six-week Regular Session running from the end of June into the beginning of August and a three-week Post Session in August make it easy to arrange vacation schedules. Some programs are almost vacations in themselves

such as the one-week Mini Courses in Biology featuring local field trips or the Environmental (Outdoor) Education Workshop which includes camping and an overnight canoe trip.

The College's location near some of this country's prime historical sites makes it a natural for some choice Bi-Centennial offerings. Try a course in Revolutionary America to explore the growth and development of our cultural way of life. A three-segment course in American architecture will also delve into the past tracing our history in buildings from the clapboard house of the seventeenth century concluding with the works of the twentieth century architectural giants.

West Chester is more than just a summer place, however. If you are interested in finding out more about the school, just fill in the coupon you'll find in the back of this catalog. Chances are you'll discover that West Chester has what you want.

Graduate Programs at West Chester

CERTIFICATION AND/OR MASTER OF EDUCATION

- Biology
- Counselor Education*
  - Elementary School Counseling
  - Secondary School Counseling
- Driver Education and Safe Living**
- Elementary Education
- English
- French
- Geography
- German
- Health Education
- Health and Physical Education
- Instructional Media Education
- Latin
- Mathematics
- Reading
- Secondary Education
- Social Science
  - Concentrations in:
  - Anthropology-Sociology
  - Geography
  - History
  - Political Science
  - Psychology
- Spanish
- Special Education:
  - Teaching the Emotionally Disturbed**
    (Offered periodically, as announced)

MASTER OF ARTS

- Biology
- English
- French
- Geography
- History
- Mathematics
  - Options in:
  - Pure Mathematics
  - Mathematics Education
  - Applied Computer Science
- Music
- Philosophy
- Physical Science
- Psychology
- Social Science
  - Concentrations in:
  - Anthropology-Sociology
  - Geography
  - History
  - Political Science
  - Psychology
- Spanish
- Speech Pathology
- Teaching English as a Second Language

MASTER OF MUSIC

- Music Education
- Music Theory or Composition
- Performance

MASTER OF SCIENCE

- Chemistry
- Criminal Justice***
- Educational Research
- Health
- Health and Physical Education
- Instructional Media

*At West Chester State College, the master's degree is required for those seeking certification in Counselor Education.
**Certification only.
***Pending Pennsylvania Department of Education approval.

GENERAL INFORMATION

West Chester's summer program takes place in three sessions of three, six and three weeks, respectively. The calendar appears inside the front cover of this book. Any student taking a summer course at West Chester is entitled to make full use of all the College's resources—and they are extensive.

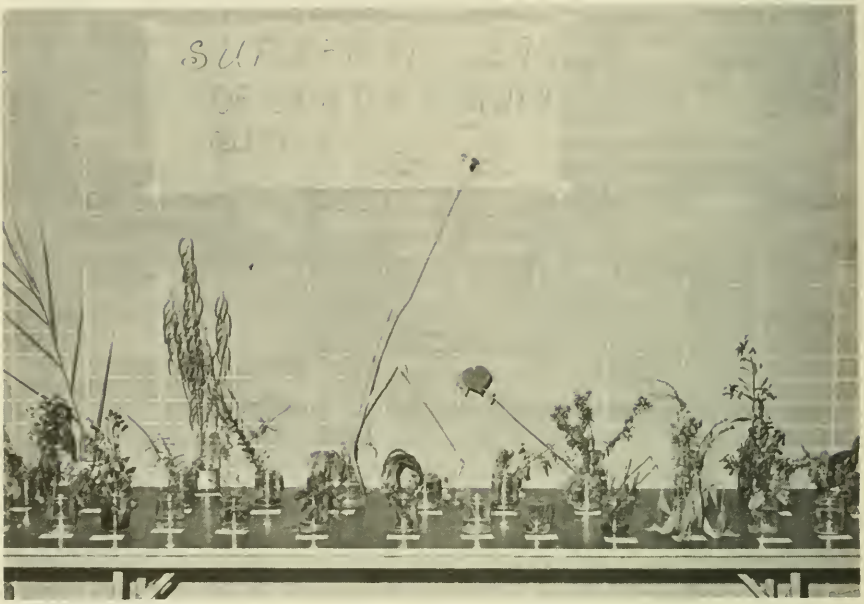
As one of the largest of the State's 14 institutions of higher learning, West Chester State College is a multi-purpose, comprehensive school now in its second century. Among the many programs offered (shown on page 6) are those in teacher education, music, professional preparation, arts and sciences. New courses of study and programs at the graduate level are constantly being developed. For complete details, consult the Graduate Catalog available from the Graduate office located in the Administration Building or by sending the coupon in the back of this publication.

The Administration Building is open Monday through Friday 8:00 a.m. to 4:30 p.m. through May 27. From June through August, the building closes at 4:00 p.m.

HOW TO REACH WEST CHESTER

The Borough of West Chester is easily accessible from all directions both by car and public transportation. Route 3, the West Chester Pike, leads directly into town from center-city Philadelphia. From the Pennsylvania Turnpike, motorists traveling west should take Route 202 south from the Valley Forge Interchange while those traveling east can arrive via Route 100 south from the Downingtown Interchange. From the south, Route 202 from Wilmington and Routes 100 and 52 from U.S. Route 1 all lead to West Chester.

By public transportation, SEPTA buses run from the 69th Street Terminal in Philadelphia into the center of town while the Penn Central Railroad also operates a limited schedule from Philadelphia's 30th Street and Suburban Stations to West Chester.



A LOOK AT THE TOWN AND COUNTRY. Located in a basically agricultural region within easy commuting distance of several major metropolitan areas, West Chester offers the best of the worlds of city, country, small town and suburbia. A community of approximately 20,000, the town is about 25 miles west of Philadelphia and 17 miles north of Wilmington, Delaware. The interstate highway system and good rail connections make New York City and Washington, D.C. also easily accessible.

West Chester is the county seat of Chester County and the hub of activity for the surrounding area. It is a marketing, banking, social services and library center as well as a focus of light industry.

Despite recent rapid growth, West Chester retains its own special flavor and historical dignity. Originally settled by the Quakers during colonial times, the town still has streets lined with well-kept 19th Century brick houses, many with detailed ornamental iron decoration from nearby forges. West Chester residents are proud of their historical community and take care in preserving its many architectural gems including public buildings, churches and homes.

History, art and architecture buffs can have a real field day . . . and another and another . . . in Chester County. Within short driving distance are Valley Forge, Longwood Gardens, a Mushroom Museum, the Brandywine River Museum (full of paintings by the Wyeth family and other members of the Brandywine School) and the Brandywine Battlefield.

Other nearby points of interest include Anthony Waynes' farm

home (Waynesborough) and his grave at St. David's Church, the house once occupied by poet Sidney Lanier, the Mason & Dixon Star-gazer's Stone, St. Peter's village noted for its old houses and quaint shops, and numerous beautiful and interesting houses and barns for which the county is highly famed.

Chester County's enthusiasm for its many cultural and historical sites is contagious so that even those whose interests generally lie in other areas are often soon caught up in flavor and feeling of the area.

HOUSING. If you would like to live on campus while attending summer school, West Chester has attractive, well-appointed high-rise residence halls. These are conveniently near Lawrence Center where the dining room, post office and snack bar are located and the new Sykes College Union Building with its well-stocked store, lounges, recreation facilities and snack bar. In addition each dormitory has lounge, TV and recreation areas.

After sending your pre-registration forms apply for a room by writing to the Associate Dean of Students Office, Room 206, Sykes College Union. This written application must be received at least one week prior to the beginning of the session for which housing is required. Housing is not available for married students.

FRANCIS HARVEY GREEN LIBRARY. With a collection of more than 320,000 volumes and subscriptions to more than 2,500 journals, West Chester's library is a valuable resource for study and research. The general collection is augmented by an extensive micromedia collection representing an additional 300,000 titles along with facilities for reading this material.

The Special Collections Room houses the Chester County Collection of scientific and historical books; the Normal Collection (historical books on physical education and publications by and about the faculty and alumni); *The Biographies of the Signers of the Declaration of Independence* by John Sanserson; and the Shakespeare Folios.

Other collections of note include a variety of audio-visual materials in the Instructional Materials Center; a comprehensive music library in Swope Hall; the Philips Autographed Book Library housed in a specially designed room in the Philips Memorial Building; and separate collections of children's literature and government documents.

RECREATION SERVICES. For those who like to get away from it all, West Chester has interesting cultural, social, and sports activities in the summer. Recreation Services—the office respon-

sible for meeting the leisure-time needs of summer students—arranges such regular features as excursions to Robin Hood Dell in Philadelphia, Longwood Gardens and professional baseball games.

Recreation equipment is available to summer students. Items for loan range from tennis rackets, baseball equipment, volleyballs, softball bats and balls, to tents and sleeping bags. If you want to shop uptown, or just pedal around and enjoy the scenic beauty of Chester County, you can also borrow a bicycle. The equipment is loaned from Ehinger Gymnasium.

If you like your exercise competitive, there are intramural softball and volleyball leagues for both men and women.

Social programs include dances, student-faculty coffee hours, music programs and a cinema series.

The following facilities are open for informal recreation use: Hollinger Gymnasium (College Avenue), the tennis courts on both North and South Campus, Ehinger Gymnasium, and Recreation Park, behind Sanderson Hall. Swimming will be provided as facilities are available.

For details, phone or see the Coordinator of Recreation Services, South Campus (436-2133).

PLACEMENT SERVICES. The College maintains an active Career Development Center for its students. Opportunities for employment in teaching and other careers are offered to graduates and graduating seniors at no charge, and counseling in career planning is available to all students. Location: Lawrence Center.

EMPLOYMENT AND LOANS. If you are interested in part-time or hourly work on campus or in the community, communicate with the Director of Financial Aid to Students, Lawrence Center. He is also the person to see for information about loans.

STUDENT HEALTH SERVICE. To meet emergency and first-aid needs and to perform routine infirmary treatment of minor illness and minor surgical conditions, two part-time physicians and a staff of registered nurses are available at no cost to students. Beyond these services, the College does not furnish medical care nor bear the costs of medical or surgical treatment or hospitalization. The community of West Chester has qualified physicians and excellent hospital facilities. The Health Service is in Reynolds Hall where, for emergencies, a nurse is on duty on a 24-hour basis.

Summer students may take advantage of a group medical and accident policy, approved by the College and covering them for

the 12 weeks of the summer session, at a minimal premium. See the Health Service.

THE COUNSELING CENTER. The professional counseling and psychological services of the Counseling Center are available to students needing assistance regarding educational, vocational, personal, social and emotional concerns. The counseling psychologists who staff the Center are experienced in counseling, personality evaluation and administration of psychological tests. Assistance is provided through both individual and group approaches, depending upon student need. All conversations and test results are confidential. Location: Lawrence Center.

VETERANS' AFFAIRS. West Chester is an accredited college for the education of veterans and maintains an Office of Veterans' Affairs. To apply for benefits, veterans should visit this Office, located in the Administration Building.

APPLYING FOR ADMISSION FOR THE ACADEMIC YEAR. The Graduate Office will be glad to give you an application form and a Graduate Studies Bulletin in which you will find admission requirements as well as full information about the College's degree programs.

SUMMER SESSIONS FEES & EXPENSES

Fees are subject to change without notice.

All charges for a session must be paid on the day of registration.

(Unless otherwise specified, fees are paid by check or money order payable to: Commonwealth of Pennsylvania. Your check or money order serves as your receipt.)

Basic Fee (Pennsylvania Residents)

$43 per semester hour of credit.

Basic Fee (Out-of-State Students)

$80 per semester hour of credit.

Housing Fee (Room and Meals)

Regular Session: $168
Pre or Post Session: $84
No reduction for absences of a few days.

Private rooms: $2 extra per week. Charges for individual meals: breakfast 75¢, lunch $1.00, dinner $1.50.

Music Instruction Fee

(Regular Session)

Piano, Organ, Instrument, or Voice—two half-hour lessons per week: $45
Instrument Class or Ensemble: $35

Pipe Organ for Practice

Regular Session: $12
Pre or Post Session: $6
(No charge for piano for practice)

Rental of Band or Orchestral Instruments

Regular Session: $6
Pre or Post Session: $3

Late Registration Fee

The $10 late registration fee is charged when students register after classes begin.

IGA Student Government Fees

(Check or money order payable to: Intracollegiate Governmental Association)

Regular Session: $4.00
Pre or Post Session: $2.00

Refunds

In cases of personal illness, certified by the attending physician, or for emergency reasons having Trustees' approval, the College will refund a portion of basic fees.

ACADEMIC INFORMATION

CREDITS. Credits are usually earned at the rate of one semester hour for each week of summer session. A student attending all three sessions normally earns 12 credits.

West Chester students wishing to carry more than six semester hours in Regular Session must secure permission from their advisors.

WITHDRAWAL FROM A COURSE IN SUMMER SESSION. Students who withdraw after registration and before attending any classes are entitled to a refund of all but $10. Students who withdraw before one third of the scheduled classes have met are entitled to a refund of one-half of the fees paid. Students who withdraw after one-third of the scheduled classes have met ARE NOT ENTITLED TO A REFUND. Students who stop attending classes in which they are enrolled will receive a WP or a WF for the course.

In order to withdraw officially from summer session classes, a student must submit a completed summer session withdrawal form to the Graduate Office.

WITHDRAWAL FROM THE COLLEGE. A student intending to withdraw completely from the graduate program must give the Dean of Graduate Studies written notice stating the reason for the withdrawal. The student's last day in classes will be considered the student's termination date.

COLLEGE REGULATIONS AND POLICIES. The class-absence policy for the academic year applies in summer.

All academic policies are as noted in the Graduate Studies Catalog.

HOW TO PRE-SCHEDULE, SCHEDULE & REGISTER

PERMITS TO REGISTER for the Summer Sessions will be mailed to all students presently enrolled in graduate courses and to those on the mailing list.

Graduate students may pre-schedule for **any** of the summer sessions between April 26 and May 14, 1976. If you are a new student or did not receive a PERMIT TO REGISTER through the mail, please contact:

The Graduate Office
Room 205
Administration Building
215-436-2243

PLEASE NOTE: You have completed the **Scheduling** process when your PERMIT TO REGISTER, properly completed and bearing **both** your signature and the signature of your advisor, has been returned to the Graduate Office. Improperly signed PERMITS TO REGISTER will be returned to you by the Graduate Office. A **Pre-Scheduling** period (April 26 - May 14) has been established so that the students may complete the scheduling process prior to the registration period and avoid possible delays.

You have completed the **Registration** process only when your records have been entered into the College data bank and when you have paid your bill.

No bills will be mailed to students enrolling in the Summer Sessions. Please consult the calendar printed below to learn how to complete registration for each summer session.

TO PRE-SCHEDULE AND SCHEDULE

1. Contact your advisor, complete your PERMIT TO REGISTER, obtain the necessary signature(s) and sign the card yourself.

Please consult the special pre-scheduling instructions printed below for each School and also note any restrictions on course enrollment printed in the course listing. If you have any questions, please contact the Graduate Office.
2. Return your signed PERMIT TO REGISTER to the Graduate Office. No bill will be mailed to you.

SCHOOL OF ARTS AND LETTERS

Speech Pathology and Audiology—Advanced graduate students: call advisor to schedule an appointment, March 15 - April 15
Other enrolled graduate students: Wayne 200, April 27, 7:00-9:00 pm
Exceptional cases handled by appointment: Call 436-3401
All other departments in the School of Arts and Letters will schedule during the regular scheduling times (see calendar) by appointment.

SCHOOL OF EDUCATION

Monday, April 26 through Thursday, April 29.

Elementary Education—Anderson Hall, Room 300A, 1 to 6 p.m.
Monday—A-H
Tuesday—I-P
Wednesday—Q-Z
Thursday—By appointment with faculty advisor. Call for an appointment.

Instructional Media—Anderson Hall, Room 17, 1 to 6 p.m.
Reading—Recitation Hall, Room 210, 3:30 to 6:30 p.m.
Monday and Tuesday A-L
Wednesday and Thursday M-Z
Secondary Education—Anderson Hall, Room 305, 1 to 6 p.m.
Special Education—Special Education Building, Room E101, 1 to 6 p.m.
Urban Education—Call Mr. Leeds, 436-2218 for an appointment.

April 26 through May 14

Counselor Education—Students may schedule during their advisors' posted office hours or by arranging a special appointment.
Criminal Justice—628 S. High St., 2nd floor, 12:00 to 4:00 p.m. or by appointment.
Educational Research—Call Dr. Peters, 436-2886 for appointment.

SCHOOL OF HEALTH & PHYSICAL EDUCATION

Telephone advisement and scheduling—dial 215-436-2260

1. April 26, May 3 and May 10 from 9:00 am - 10:00 am
2. April 29 and May 13 from 3:00 pm - 4:30 pm

In-person advisement and scheduling—Room 206, Health and Physical Education Center

1. May 4 4:30 pm - 6:00 pm
2. May 11 7:00 pm - 9:00 pm

SCHOOL OF MUSIC

Counseling by appointment, telephone or mail: April 26-May 14, 8:00 am - 4:30 pm. Swope Hall, Room 11. Write or call Dr. Singleton, 436-2539.

SCHOOL OF SCIENCES & MATHEMATICS

Biology—May 3 and 5 from 4:00 pm - 7:00 pm in Room C221, Schmucker Science Center.
Chemistry—April 27, May 4 and May 11 from 4:00 pm - 6:00 pm in Schmucker, Room C340. For other appointments, call Dr. Bravo 436-2778.
Earth/Space Science—Contact advisor for an appointment.
Mathematical Sciences—All faculty advisors will be available May 3, May 5 from 4:00 pm - 7:00 pm.
Physical Science—Contact advisor for an appointment.

SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

History—April 26 - May 14, Main 211, Monday-Wednesday, 3:30 - 5:00 pm.
All other departments in the School of Social and Behavioral Sciences will schedule during the regular scheduling times (see calendar) by appointment.

CALENDAR FOR SUMMER SESSIONS REGISTRATION INFORMATION

April 26 (Monday)— May 14 (Friday)

Pre-scheduling for any summer session

June 3 (Thursday)

2 - 6 pm Scheduling for Pre-Session only
2 - 6:30 pm Registration for Pre-Session only

If you have pre-scheduled for Pre-Session, go directly to Lawrence Center, get your bill and pay it. If you are a new student or do not have a PERMIT TO REGISTER, report to the Graduate Office in the Administration Building to obtain a PERMIT TO REGISTER, see your advisor, return your signed PERMIT TO REGISTER to the Graduate Office, obtain a business office card, go to Lawrence Center and pay your bill.

June 7 (Monday)

Classes begin
Graduate Office will be open until 6 pm.
The late registration fee of $10 will be assessed all graduate students whose registrations for Pre-Session are processed on or after this date.
Drop & Add Period for Pre Session only

June 24 (Thursday)

Scheduling for Regular Session only
A — L 9 am - 12 noon
M — Z 1 - 3 pm
Registration for Regular Session only.
Lawrence Center
A — L 9 am - 12 noon
M — Z 1:30 - 3:30 pm

If you have pre-scheduled for Regular Session, go directly to Lawrence Center, get your bill and pay it. If you are a new student or do not have a PERMIT TO REGISTER, report to the Graduate Office in the Administration Building to obtain a PERMIT TO REGISTER, see your advisor, return your signed PERMIT TO REGISTER to the Graduate Office, obtain a business office card, go to Lawrence Center and pay your bill.

June 28 (Monday)

Undergraduate registration for Regular Session

June 29 (Tuesday)

Classes begin
Graduate Office open until 5 pm
Drop & Add period for Regular Session only

The late registration fee of $10 will be assessed all graduate students whose registrations for Regular Session are processed on or after this date.

August 9 (Monday)

Scheduling for Post Session only
10 am - 12 noon
1 - 3 pm
Registration for Post Session only.
Lawrence Center
8 am - 12 noon
1 - 3:30 pm
Undergraduate registration for Post Session also takes place

If you have pre-scheduled for Post Session, go directly to Lawrence Center, get your bill and pay it. If you are a new student or do not have a PERMIT TO REGISTER, report to the Graduate Office in the Administration Building to obtain a PERMIT TO REGISTER, see your advisor, return your signed PERMIT TO REGISTER to the Graduate Office, obtain a business office card, go to the Lawrence Center and pay your bill.

August 10 (Tuesday)

Classes begin
Drop and Add Period for Post Session only.
The late registration fee of $10 will be assessed all graduate students whose registration for Post Session are processed on or after this date.

Pre Session

Monday, June 7 through Friday, June 25

See the 1976-1977 Graduate Studies Bulletin for course descriptions. NEW, following a course listing indicates a course not previously offered or currently described. Descriptions for these courses appear in this publication beginning on page 33. All offerings listed are contingent upon sufficient enrollment. Semester hours of credit are shown in parentheses following the course title. Classes meet daily, Monday through Thursday unless otherwise noted.

Art

8:00-9:30 am, 10:30 am-noon

Art 551—Art Education in the Elementary School (2)

4:30-7:30 pm

Art 582—American Architecture: Colonial and Early Republic (3) (Part 1 of sequence) NEW

Biology

4:30-7:00 pm

Bio 500—Methods and Materials in Biological Research (3)

6:00-8:00 pm

Bio 570—Seminar in Populational Biology (2)

Chemistry

4:30-8:00 pm

Che 515—Topics in Inorganic Chemistry (3) Topic: Industrial Chemistry

4:30-7:00 pm

Che 504—Foundations of Nutrition* (2) (Not for M.S. in Chemistry)

TBA

Che 505—Fundamental Topics in Chemistry (3) Topic: Organic Chemistry or Physical Chemistry (Not for M.S. in Chemistry)

Earth Sciences

4:40-6:30 pm

ScE 595—Elementary School Science Instruction (3)

7:00-10:00 pm

ESS 524—History of Geology (1) June 7-June 10
ESS 525—Glacial Geology (1) June 14-June 17
ESS 526—Geology of Petroleum (1) June 21-June 24
ScE 523—Instructional Materials in Elementary Science (3)

Education

Counselor Education

(Counselor Education Department approval required for all courses.)

6:00-9:30 pm

EdC 520—Counseling for Human Differences (3)
EdC 567—Group Dynamics (3)
EdC 575—Group Procedures in the Secondary Schools (3)
EdC 585—Issues and Trends in Guidance (3)

Elementary Education

(Elementary Education Department approval required for all courses.)

*Graduate students may enroll in this course with the approval of their advisor

6:00-9:30 pm

EdE 522—Teaching the Communication Skills (3)
EdE 561—Guidance in the Elementary School (3)
EdE 695—Seminar in Elementary Education (3)

Instructional Media

(Instructional Media Department approval required for all courses.)

6:00-9:30 pm

EdM 502—Selection and Effective Utilization of Educational Media (3)
EdM 505—The Motion Picture in Education (3)
EdM 508—Instructional Materials in the Elementary School Curriculum (3)
EdM 519—Library Science (3)

TBA

EdM 590—Internship Program in Educational Media (2)

Reading

(Reading Department approval required for all courses.)

4:30-7:00 pm

EdR 521—Reading Clinic Practicum and Seminar I (3)

6:00-9:30 pm

EdR 510—Foundations of Reading Instruction: K-12 (3)
EdR 522—Reading Clinic Practicum and Seminar II (3)
EdR 540—Seminar in Reading (3)

Secondary Education and Professional Studies

6:00-8:30 pm

EdF 500—Methods and Materials of Research in Education (2)

6:00-9:30 pm

EdF 510—Educational Foundations (3) Section 01, Section 02, Section 03, Section 04
EdF 523—Education Behind the Iron Curtain (3)
EdF 590—School Law (3)
EdP 650—Behavior Modification (3)
EdS 560—The Junior High School (3)

English

6:00-9:30 pm

Lit 516—Major 20th Century American Poets (3)
Lit 530—Victorian Poetry & Prose II (3)

Foreign Languages

6:00-9:30 pm

LAN 580—Seminar in Second Language Education (3) (Teaching Reading to Non-English speakers) For application consult Dr. P. D. Smith, Jr., Joint Coordinator, English as a Second Language.
SPA 513—Advanced Oral Spanish (3) NEW

Geography and Planning

6:00-9:30 pm

Geo 505—Advanced Cartography (3)

Health and Physical Education

Health Education

6:00-9:30 pm

HEd 542—Human Sexuality in a Changing Society (3)
HEd 569—Addictive Diseases (3)

Physical Education

6:00-9:30 pm

PEd 521—Sports Psychology (3)
PEd 531—Adapted Physical Education (3)
PEd 560—Contemporary Problems in Health, Physical Education and Recreation (3)

PEd 560—Contemporary Problems in Health, Physical Education and Recreation (3)
PEd 562—Administrative and Supervisory Practices in Health, Physical Education, Recreation and Athletics (3)
PEd 570—Curriculum in Health and Physical Education (3)
PEd 582—Problems in Traffic and Driver Education (3)
PEd 505—Learning on the Move (3)

History

6:00-9:30 pm

His 509—Revolutionary America: 1763-1789 (3)
His 529—Contemporary History of the Middle East (3)
His 533—Dynastic Europe; 1648-1789 (3)

Mathematical Sciences

6:00-9:30 pm

MtE 507—Current Trends in Teaching Mathematics (3)
MtE 530—Geometry for the Elementary Teacher (3)
MtE 563—Use of Mathematics Laboratory in the Secondary School (3)
CSc 550—Computers in Education (3)

7:00-9:45 pm

ISS 505—Experiences in the Metric System (1) NEW June 7-11

Music

6:00-9:30 pm

Mus 527—Projects to Individualize Music Classes (3)
Mus 661—Jazz Practices (3)

Philosophy

6:00-9:30 pm

Phi 531—Oriental Philosophy (3)

Psychology

5:00-8:30 pm

Psy 505—Advanced General Psychology (3)
*Psy 549—Introduction to Projective Techniques (3) Thurs.

TBA

*Psy 600—Research Report (2)
*Psy 610—Thesis (3)
**Psy 615—Clinical Practicum in Psychology (2-6)

Speech Pathology and Audiology

6:00-9:30 pm

SpP 531—Therapy for the Hearing Impaired (3)

TBA

SpP 590—Independent Study (1-3)
SpP 610—Thesis (1-6)

*Require Departmental Permission
**For students who entered the Psychology Program after January 1975, the following courses are prerequisites to registration for Psy 615: Psy 503, 504, 505, 506, 512, 517, 524, 527, 544, 549, 559, 595 or 596

Regular Session

Monday, June 28 through Friday, August, 6

See the 1976-1977 Graduate Studies Bulletin for course descriptions. NEW, following a course listing indicates a course not previously offered or currently described. Descriptions for these courses appear in this publication beginning on page 33. All offerings listed are contingent upon sufficient enrollment. Semester hours of credit are shown in parentheses following the course title. Classes meet Monday through Friday unless otherwise noted. Holiday July 5.

Art

8:00-9:30 am

Art 534—Ceramics Workshop (3)
Art 546—Drawing Workshop (3)

9:30-11:00 am

Art 520—Painting Workshop (3)
Art 525—Sculpture Workshop (3)

11:00 am-12:30 pm

Art 534—Ceramics Workshop (3)

4:30-7:30 pm

Art 583—American Architecture: 19th Century (Part II of Sequence) NEW Mon. through Thurs. June 28-July 16.
Art 584—American Architecture: Contemporary (3) (Part III of Sequence) NEW Mon. through Thurs. July 19-August 6.

Biology

8:00-9:30 am

Bio 550—Seminar in Organismic Biology (2)

11:00 am-12:30 pm

Bio 503—Mammalian Physiology (3)

MINI-COURSES IN BIOLOGY

Biology students may not take the mini-courses as partial fulfilment of degree requirements.

Each of these field courses meets five days. Mon. through Fri., from 9:00 to 12:00 Noon and from 1:00 to 3:00.

June 19 through June 23:

Bio 516—Summer Wild flowers (1). How to identify common summer flowers of Southeastern Pa.
Bio 517—Summer birds (1). How to identify common summer birds of Southeastern Pa.

July 26 through July 30:

Bio 515—Common Trees (1). How to identify common trees of Southeastern Pa.
Bio 517—Summer birds (1). How to identify common summer birds of the marine fringe. Includes 3 day field trip to Lewes, Delaware. Additional fee to cover cost of field trip.

August 2 through August 6:

Bio 512—The Living Forest (1). A study of the major components and structure of the forest ecosystem.

Chemistry

8:00-9:30 am

Che 503—Chemistry of the Environment (3) (Not for M.S. in Chemistry)

9:30-11:00 am

Che 513—Geochemistry (3) (Also ESS 513)

TBA

Che 505—Fundamental Topics in Chemistry (For M.A. Only) Topic: Quant. Analysis (5) or Biochemistry (3)
Che 590—Independent Studies in Chemistry (1-6)
Che 610—Research and Thesis (2-6)

Criminal Justice

(Criminal Justice Department approval required for all courses)

6:00-9:30 pm

CrJ 542—One to One Counseling (3) NEW Section 01 Monday and Wednesday, Section 02 Tuesday and Thursday
CrJ 520—Notable Criminal Cases (3) Monday and Wednesday

Earth Sciences

8:00-9:30 am

ESS 512—Historical Geology (3)
ESS 540—Introduction to Meteorology (3)
ScE 502—Modern Trends in Teaching Earth and Space Science (3) NEW

9:30-11:00 am

ESS 515—Introduction to Rocks (3)
ESS 550—General Astronomy (3)
ScE 500—Modern Trends in Science Education (3)
ScE 520 New Trends in the Elementary School Science Curriculum (3)

11:00 am-12:30 pm

ESS 510—Principles of Physical Geology (3)
PhS 590—History of the Physical Sciences (3)

TBA

Marine Science Consortium

As a participant in the Delaware Bay Marine Science Consortium, West Chester offers courses in oceanography and marine sciences at the Consortium field stations in Delaware and Virginia during five summer sessions. Course offerings and dates of sessions will be announced soon after March 1. For details, contact Mr. John E. Ehleiter, Associate Professor, Department of Earth Sciences.

Economics

8:00-9:30 am

Eco 533—Teaching Economics in Secondary Schools (3) NEW

Education

Counselor Education

(Counselor Education Department approval required for all courses.)

8:00-9:30 am

EdC 540—Assessment Methods in Guidance (3)
EdC 567—Group Dynamics (3)

9:30-11:00 am

EdC 556—Career Development Theories and Practices (3)
EdC 567—Group Dynamics (3)
EdC 571—Theories of Counseling (3)

11:00 am-12:30 pm

EdC 503—Introduction to Guidance Services (3)
EdC 590—Practicum in Elementary Guidance and Counseling (3)
EdC 591—Practicum in Secondary Guidance (3) Section 01, Section 02

Elementary Education

(Elementary Education Department approval required for all courses.)

8:00-9:00 am

EdE 504—Early Childhood Education Programs (3)
EdE 544—Theory and Historical Background of Open Education in Elementary Schools (3)

EdE 548—Curriculum Theory and Trends in Elementary Education (3)
EdE 553—Child Development and Behavior II (3)
EdF 501—See Secondary Education

9:30-11:00 am

EdE 530—Social Studies in Elementary Education (3)
EdE 543—Creative Expression in the Elementary School (3)
EdE 560—Meeting Individual Needs of Children (3)
EdE 581—Workshop in Open Education (3)

11:00am-12:30 pm

EdE 549—Theory and Trends in Language Arts (3)
EdE 551—Child Development and Behavior I (3)
EdE 553—Child Development and Behavior II (3)
EdE 565—Effective Classroom Management (3)
EdE 583—Workshop in Creativity (3)

Instructional Media

(Instructional Media Department approval required for all courses.)

8:00-9:00 am

EdM 502—Selection and Effective Utilization of Educational Media (3)
EdM 520—Designing Instructional Materials (3)

9:30-11:00 am

EdM 519—Library Science (3)
EdM 522—Production of Non-Projected and Projected Materials (3)
EdM 560—Organization and Administration of the Educational Media Program (3)

11:00 am-12:30 pm

EdM 525—Photography for Teachers (3)
EdM 529—Instructional Use of the 8mm Motion Picture Camera (3)
EdM 555—Learning Theories Related to Educational Media (3)

Reading

(Reading Department approval required for all courses.)

8:00-9:00 am

EdR 516—Reading Disabilities (3)

9:30-11:00 am

EdR 510—Foundations in Reading Instruction: K-12 (3)
EdR 511—Current Practices in Teaching Developmental Reading (3)
EdR 522—Reading Clinic Practicum and Seminar II (3) Section 01

11:00 am-12:30 pm

EdR 522—Reading Clinic Practicum and Seminar II (3) Section 02
EdR 525—Reading for the Disadvantaged (3)
EdR 541—Organization and Operation of Reading Programs: K-12 (3) Section 01. Section 02

Secondary Education and Professional Studies

8:00-9:00 am

EdF 500—Methods and Materials of Research in Education (2) Section 01
EdF 501—Methods and Materials of Research and Study for Elementary Education Majors (3)
EdF 503—The Emerging Curriculum (3)
EdF 507—Values Clarification in Human Relations (3)
EdF 510—Educational Foundations (3) Section 01, Section 02
EdF 521—Contemporary British Education (3)
EdP 550—Advanced Educational Psychology (3) Section 01

9:00-12:00 noon

EdF 504—Middle School Workshop (3) Section 01—June 28-July 16, Section 02—July 19-August 6

9:30-11:00 am

EdF 500—Methods and Materials of Re-

search in Education (2) Section 02
EdF 505—Individually Prescribed Instruction (3)
EdF 510—Educational Foundations (3) Section 03, Section 04
EdO 515—History of Conservation (3)
EdP 569—Adolescent Development and Learning (3)
EdS 502—Secondary School Curriculum (3)

11:00 am-12:30 pm

EdF 502—Methods and Materials of Research for Counselor Ed. Majors (3) NEW
EdF 501—Educational Foundations (3) Section 05
EdF 580—History of American Education (3)
EdP 550—Advanced Educational Psychology (3) Section 02
EdS 524—Supervision of Student Teaching (3)

6:00-8:30 pm

EdF 500—Methods and Materials of Research in Education (2) Section 03, Mon. and Wed.

6:00-9:30 pm

EdF 510—Educational Foundations (3) Section 06, Tue. and Thur.

Special Education

8:00-9:30 am

EdA 541—Psychology of Exceptional Children (3) Permission of the Instructor required.

8:00-12:00 noon

EdA 540—Summer Special Education Workshop (4) Permission of the Instructor required. Limited enrollment

Urban Education

9:30-11:00 am

EdU 501—Curricular Adaptations for the Disadvantaged (3)

English

8:00-9:30 am

Eng 501—Modern Techniques for the Teaching of English (3)

9:30-11:00 am

Eng 519—Studies in American English (3)
Lit 524—British and Continental Short Story (3)

11:00 am-12:30 pm

Lit 551—Literature for the Secondary School (3)

Lit 695—Seminar in American Literature: The American Revolution in Literature from the Colonial Period to the Present (3) A special Bicentennial course.

4:30-6:30 pm

Lit 537—English Drama to 1642 (excluding Shakespeare) (3) NEW Mon. through Thur.

7:00-9:00 pm

Lit 542—Comparative Literature: The Greek Myths (3) NEW Mon. through Thur.

Foreign Languages

8:00-9:30 am

LAT 527—Roman Historiography (3)
LAT 526—Greek and Latin Epic (3)

9:30-11:00 am

LAN 511—Roman Civilization for Students of Foreign Languages (3) (Taught in English)
SPA 544—Masterpieces and Movements in Spanish Literature (3)

11:00 am-12:30 pm

FRE 515—French Civilization (3)
SPA 512—Advanced Spanish Grammar and Stylistics (3)
LAN 502—Second Languages in the Elementary School (3)

TBA

GER 590—Independent Studies (3)

Summer Seminars in Foreign Language Education

Three courses in new theories and techniques in foreign language education will be offered during the Regular Session, 1976. For application, communicate with Mr. Ronald L. Gougher, Director of Summer Workshops, Department of Foreign Languages.

LAN 580.01—Individualizing Foreign Language Instruction (3) June 21-July 2 9:00 a.m.-5:30 p.m.

LAN 580.02—Curriculum for Individualizing Foreign Language Instruction (2) June 28-July 2, 9:00 a.m.-5:30 p.m.

LAN 580.03—Real Communication and Humanizing Foreign Language Instruction (2) July 12-July 16 9:00 a.m.-5:30 p.m.

Geography and Planning

9:30-11:00 am

Geo 500—Methods and Materials of Geographic Research (3)

11:00 am-12:30 pm

Geo 584—Modern Techniques of Teaching Geography (3)

Government and Politics

6:00-9:30 pm

PSc 510—Grass Roots Politics and the American Voter (3) Tues. and Thurs.

TBA

PSc 600—Research Report (2)

Health and Physical Education

Health Education

8:00-9:30 am

HEd 565—Scientific Bases for Health (3)

9:30-11:00 am

HEd 544—Principles of Curriculum and Instruction for Health Education (3)

11:00 am-12:30 pm

HEd 540—School Health Problems (3)

Physical Education

8:00-9:00 am

PEd 500—Methods and Materials of Research in Health and Physical Education (2)

PEd 502—Elementary Physical Education Workshop (2)

8:00-9:30 am

PEd 550—Historical and Philosophical Bases for Health and Physical Education (3)

PEd 561—Techniques of Measurement and Evaluation in Health and Physical Education (3)

9:30 am or By Appointment

PEd 591—Research Project Seminar I (2)
PEd 592—Research Project Seminar II (1)
PEd 593—Thesis Seminar (2)

9:30-10:30 am

PEd 504—Elementary Physical Education Recreation Music Workshop (2)

9:30-11:00 am

PEd 530—Scientific Bases for Physical Education (3)

PEd 564—Biodynamics of Human Performances (3)

PEd 571—Comparative Physical Education (3)

11:00 am-12:30 pm

PEd 534—Modern Principles of Athletic Training (3)
PEd 566—Mechanical Analysis of Motor Skills (3)
PEd 572—The Child and Physical Education (3)
PEd 587—Seminar in the Four-Phase Program of Driver Education (3)

1:30-2:30 pm

PEd 512—Outdoor Education Workshop (2)

5:30-9:15 pm

PEd 584—Seminar in Motorcycle Safety Education (3). THREE WEEK SESSION: June 28-July 15 Monday through Thursday. (Students must register in the prescribed manner for Regular Session)

By Appointment

PEd 600—Independent Study and Special Projects (1-3)
PEd 610—Thesis (4)

History

8:00-9:30 am

His 516—Recent American Diplomatic History (3)
His 525—Studies in the History and Culture of East Asia (3)

9:30-11:00 am

His 500—Methods and Materials of Research in History (3)
His 510—Workshop in Teaching the Bicentennial beyond 1976 (3)

11:00 am-12:30 pm

His 513—Emergence of Modern America: 1876-1923 (3)
His 531—The Renaissance (3)

TBA

SSc 580—**Ethnic Cultures Workshop** (3) Lectures and special programs designed to increase the student's knowledge in the area of multi-ethnic studies. Evaluation based on individual contract determined at the time of admission to the course. Further information is available from the Institute for Ethnic Studies.

Mathematical Sciences

8:00-9:20 am

Mat 512—Modern Algebra (3)
Mat 532—Modern Geometry (3)
Mat 543—Topics in Differential Equations (3)
MtE 508—Topics in Mathematics Education (3)
MtE 556—Development of Mathematics Curricula in the Elementary Grades (3)

9:30-10:50 am

CSc 501—Introduction to Computers (3)
Mat 514—Theory of Numbers (3)
Mat 541—Advanced Calculus (3)
MtE 510—Algebra for the Elementary Teacher (3)
MtE 558—Teaching Mathematics in the Junior High School (3)

11:00 am-12:20 pm

CSc 595—Topics in Computer Science (APL Programming) (3)
MtE 501—Fundamental Concepts of Mathmatics I (3)
MtE 562—The Laboratory Approach to Teaching Elementary School Mathematics (3)
MtE 568—Seminar for Secondary School Mathematics Teachers (Testing and Evaluation in Secondary School Mathematics) (3)
Sta 525—Probability (3)

1:00-3:45 pm

ISS 505—Experiences in the Metric System (1) NEW July 12-16
ISS 506—Metrics for Classroom Use (1) NEW July 19-23

Music

8:00-9:30 am

Mus 501—Aspects of Musical Style I (3)
Mus 511—Vitalizing Music in the Elementary School (3)
Mus 552—Vocal Diction I (3)

Mus 592—Marching Band Techniques and Materials (3)

9:30-10:30 am

SEn 546—String Ensemble (2)
WEn 546—Woodwind Ensemble (2)
MaB 558—Master Class in Brass (2)

9:30-11:00 am

Mus 503—Philosophical Foundations of Music Education (3)
Mus 510—Current Trends in Music Education (3)
Mus 591—Vocal Pedagogy (3)
Mus 629—History of Music in the United States (3)

11:00 am-12:00 noon

ICo 556—Advanced Instrumental Conducting (2)

11:00 am-12:30 pm

Mus 500—Methods and Materials of Research (3)
Mus 502—Aspects of Musical Style II (3)
Mus 633—Music of the Baroque Period (3)
Mus 651—Advanced Orchestration (3)

12:30-1:30 pm

Orc 542-545—Orchestra (1)
BrC 548—Class Lessons in Brass (2)
CCo 556-557—Advanced Choral Conducting (2)

12:30-2:00 pm

Mus 516—Administration and Supervision of School Music (3)
Mus 590—Piano Pedagogy (3)
Mus 608—Brass Literature (3)

2:00-3:00 pm

Cho 542-545—Chorus (1)

2:00-3:30 pm

Mus 609—String Literature (3)

3:00-4:00 pm

Bnd 542-545—Band (1)

By Appointment

Private instruction in piano, voice, and instruments. (Contact School of Music for details)

Mus 696—Recital (1)
Mus 697—Recital (2)
Com 699—Musical Composition (3)
Mus 699—Thesis in Music Education, Theory, or History and Literature (3)

Workshop

CMC 680—Workshop: Comprehensive Music Classes NEW Section 01, July 19, 20, 21, 22, (2) Section 03, July 19, 20, 21, 22, 23 (3) Clinicians Elizabeth Crook and Mary Hoffman will present skills for teaching the qualities of organized sound which allow learners in general music classes to perceive and respond with a functional insight into the nature of music. Follow-up emphasis will apply these skills to prevailing philosophies of music education. Three-day workshop fee for no credit: $30.00. Optional graduate credit: regular graduate credit fee in addition. Two credits: four days. Three credits: five days plus research paper. For information, contact Dr. Richard C. Merrell, School of Music.

Psychology

6:00-9:30 pm

Psy 506—Theories of Learning (3) Tues. and Thurs.
Psy 517—Introduction to Psychopathology (3) Mon. and Wed.
Psy 527—Behavior Modification (3) Tues. and Thurs.
*Psy 544—Individual Psychometric Techniques: Wechsler and Binet Scales (3) Mon. and Wed.

TBA

*Psy 600—Research Report (2)
*Psy 610—Thesis (3)
**Psy 615—Clinical Practicum in Psychology (2-6)

*Require Departmental Permission
**For students who entered the Psychology Program after January 1975, the following courses are prerequisites to registration for Psy 615: Psy 503, 504, 505, 506, 512, 517, 524, 527, 544, 549, 559, 595 or 596

Speech Communication and Theatre

Drama Workshop

Combines study and practice in Theatre Arts. It includes formal and experimental study in acting, repertory play production, direction, makeup, costuming, scene design, stage lighting and stagecraft. The workshop is also the nucleus for a summer theatre company which stages three major productions in repertory during the regular summer session. Open to high school teachers. Graduate course credit will be granted in theatre theory and production (ThA 506). Workshop will meet in Theatre 208.

Speech Pathology and Audiology

8:00-9:30 am

SpP 511—Voice Disorders (3)

9:30-11:00 am

SpP 500—Survey of Speech Disorders (3) Open to non-majors.

11:00 am-12:30 pm

SpP 515—Orofacial Anomalies (3)

TBA

SpP 560—Graduate Clinical Practicum (1)
SpP 590—Independent Study (1-3)
SpP 610—Thesis (1-6)

Post Session

Monday, August 9 through Friday, August 27

See the 1976-1977 Graduate Studies Bulletin for course descriptions. NEW, following a course listing indicates a course not previously offered or currently described. Descriptions for these courses appear in this publication beginning on page 33. All offerings listed are contingent upon sufficient enrollment. Semester hours of credit are shown in parentheses following the course title. Classes meet Monday through Friday unless otherwise noted.

Art

6:00-9:30 pm

Art 534—Ceramics Workshop (3) Mon. through Thur.

Biology

8:00-9:30 am, 10:30 am-noon

Bio 587—Systematic Zoology (3)

Earth Sciences

TBA

ESS 520—Geology of National (Southwest) Parks (4) NEW

Education

Counselor Education

(Counselor Education Department approval required for all courses).

8:00-9:30 am, 10:30 am-noon

EdC 520—Counseling for Human Differences (3)
EdC 540—Assessment Methods in Guidance (3)
EdC 573—Counseling and Consultative Techniques in the Secondary School (3)
EdC 578—Counseling Techniques with Adults (3)
EdC 585—Issues and Trends in Guidance (3)

Elementary Education

(Elementary Education Department approval required for all courses.)

8:00-9:30 am, 10:30-noon

EdE 543—Creative Expression in the Elementary School (3)
EdE 580—Workshop in Elementary Education (3)
EdE 582—Workshop in Social Studies (3)

Instructional Media

(Instructional Media Department approval required for all courses).

8:00-9:30 am, 10:30 am-noon

EdM 522—Production of Non-Projected and Projected Materials (3)
EdM 533—Television in Education (3)
EdM 563—Field Study in Educational Media (3)

Secondary Education and Professional Studies

8:00-9:30 am, 10:30 am-noon

EdF 509—Contemporary Teaching Trends (3)
EdF 510—Educational Foundations (3) Section 01, Section 02
EdO 511—**Environmental Outdoor Education Workshop** (3) For details communicate with Mr. John Holingjak, Environmental Education Coordinator.

9:00-11:00 am

EdF 500—Methods and Materials of Research in Education (2)

Special Education

8:00-9:30 am, 10:30-noon

EdA 571—Childhood Learning Disabilities (3) Permission of the Instructor required. Limited enrollment

English

8:00-9:30 am, 10:30 am-noon

Lit 690—Seminar in English Literature: Contemporary Fiction (3)

Geography and Planning

8:00-9:30 am, 10:30 am-noon

Geo 540—Geography of the United States (3)
Geo 571—Conservation Workshop for Teachers (3)

Government and Politics

8:00-9:30 am, 10:30 am-noon

PSc 551—Politics of Non-Western Areas (3)

Health and Physical Education

Health Education

8:00-9:30 am, 10:30 am-noon

HEd 567—Sociological Bases for Health (3)

Physical Education

8:00-9:30 am, 10:30 am-noon

PEd 510—School and Community Recreation (3)
PEd 583—Psychology in Safety Education and Accident Prevention (3)

History

8:00-9:30 am, 10:30 am-noon

His 540—Evolution of Modern Russia (3)

Mathematical Sciences

8:00-9:30 am, 10:30 am-noon

MtE 500—Topics in Mathematics for Elementary School Teachers (3)
MtE 551—Mathematics for the Disadvantaged (3)
MtE 557—Transformational Geometry (3) NEW

1:30-3:45 pm

ISS 505—Experiences in the Metric System (1) NEW Aug. 9-13

Music

8:00-9:30 am, 10:30 am-noon

GTR 680 (02)—Special Subjects Seminar: Guitar for the Classroom (3)
Mus 714—Acoustics of Music (3)

By Appointment

Mus 691—Research Seminar in Music (2)
Mus 692—Research Seminar in Music (1)
Mus 698—Research Report (1)

Workshop

Mus 592—Marching Band Techniques and Materials (3) Marching Band Conference and Workshop, August 9-13. Designed primarily for high school and college directors and students, this conference is sponsored by the West Chester State College Marching Band and the School of Music. Offerings include flag, rifle, and twirling instruction for both intermediate and advanced sections. Clinic in intermediate and advanced percussion; separate workshops for students and directors. Outstanding authorities participate. For informa-

tion about this seventh annual band event, contact Dr. James R. Wells, Marching Band Director, School of Music.

Psychology

5:00-8:30 pm

Psy 512—Psychology of Personality (3) Mon. through Thurs.
*Psy 559—Advanced Principles of Psychotherapy (3) Mon. through Thurs.

TBA

*Psy 600—Research Report (2)
*Psy 610—Thesis (3)
**Psy 615—Clinical Practicum in Psychology (2-6)

Speech Pathology and Audiology

8:00-9:30 am, 10:30-noon

SpP 520—Seminar in Speech Pathology (3) Consult department for topic.

TBA

SpP 590—Independent Study (1-3)
SpP 610—Thesis (1-6)

*Require Departmental Permission
**For students who entered the Psychology Program after January 1975, the following courses are prerequisites to registration for Psy 615: Psy 503, 504, 505, 506, 512, 517, 524, 527, 544, 549, 559, 595 or 596.

NEW COURSE DESCRIPTIONS

Below are brief discriptions of summer offerings not described in the 1976-77 issue of the Graduate Studies Bulletin. For further information, contact the appropriate department. The listing is alpha-numerical by course prefix and number.

Art 582 American Architecture: Colonial and Early Republic (3)

A look at American architecture beginning with the clapboard houses of the seventeenth century and ending with the classic temples of the early nineteenth century with emphasis upon eighteenth century buildings in America.

Art 583 American Architecture: Nineteenth Century (3)

Exploration of the full diversity of nineteenth century architecture in America with special emphasis on buildings in the Philadelphia area and within traveling distance.

Art 585 American Architecture: Twentieth Century (3)

The study of modern American architecture beginning with the work of Frank Lloyd Wright; covering the influence of the International Style; and concluding with the works of Mies van der Rohe, Eero Saarinen, Paul Rudolph and Buckminster Fuller.

CrJ 542 One to One Counseling (3)

Techniques of counseling applicable to Law Enforcement and Correction officers. Areas of study include the initial interview, interrogation, handling reformers, manipulative behavior of admissions and exit interviews. Role playing and sociodrama are used.

Eco 533 Teaching Economics in the Secondary Schools (3)

EdF 502 Methods and Materials of Research for Counselor Ed. Majors (3)

ESS 520 Geology of the National Parks (SW) (4)

A look at the geologic features of the National Parks and surrounding areas to develop an appreciation of geology and geologic history. Field trips to National Parks are included with different parks visited in successive years. PREREQ: ESS 201, ESS 211.

ISS 505 Experiences in the Metric System (1)

For teachers with little or no experience in metric measurement providing an environment in which to "think metric." Concentration on basic units of metric measurement with teaching techniques, A-V aids, games and other classroom activities.

ISS 506 Metrics for Classroom Use (1)

A workshop for teachers already familiar with the metric system. Classroom activities including games, experiments, projects and individualized learning pacs will be developed.

Lit 537 English Drama to 1642 (3)

A survey of English drama (exclusive of Shakespeare) from its medieval beginnings to the closing of the theatres in 1642.

Lit 542 Comparative Literature: The Greek Myths (3)

The function and purpose of the Greek myths and their treatment in Western literature, stressing the methods and perspectives of a comparative approach to the study of literature.

MtE 557 Transformational Geometry (3)

A study of translations, rotations and reflections with applications for the classroom teacher emphasized. For teachers of transformational or motion geometry.

Sce 502 Modern Trends in Teaching Earth and Space Science (3)

An in-depth analysis of new trends and teaching techniques in Earth Science education at the junior and senior high level with emphasis on new curricula and resources.

SPA 513 Advanced Oral Spanish (3)

For teachers and professionals with emphasis on grammar and vocabulary through discussions, readings, A-V material and reports.

FOR MORE INFORMATION . . .

If West Chester State College appeals to you, and you would like to know more about either our graduate or undergraduate programs, please complete the appropriate coupon below and send to the school for a copy of the catalog you wish. We'll be happy to send it to you.

REQUEST FOR GRADUATE CATALOG

Name _____

Address _____

City _____ State _____ Zip Code _____

REQUEST FOR UNDERGRADUATE CATALOG

Name _____

Address _____

City _____ State _____ Zip Code _____

When would you wish to enter West Chester State College? 19___ September ☐ January ☐ June ☐

Are you presently attending college? Yes ☐ No ☐

Year _____ Major _____

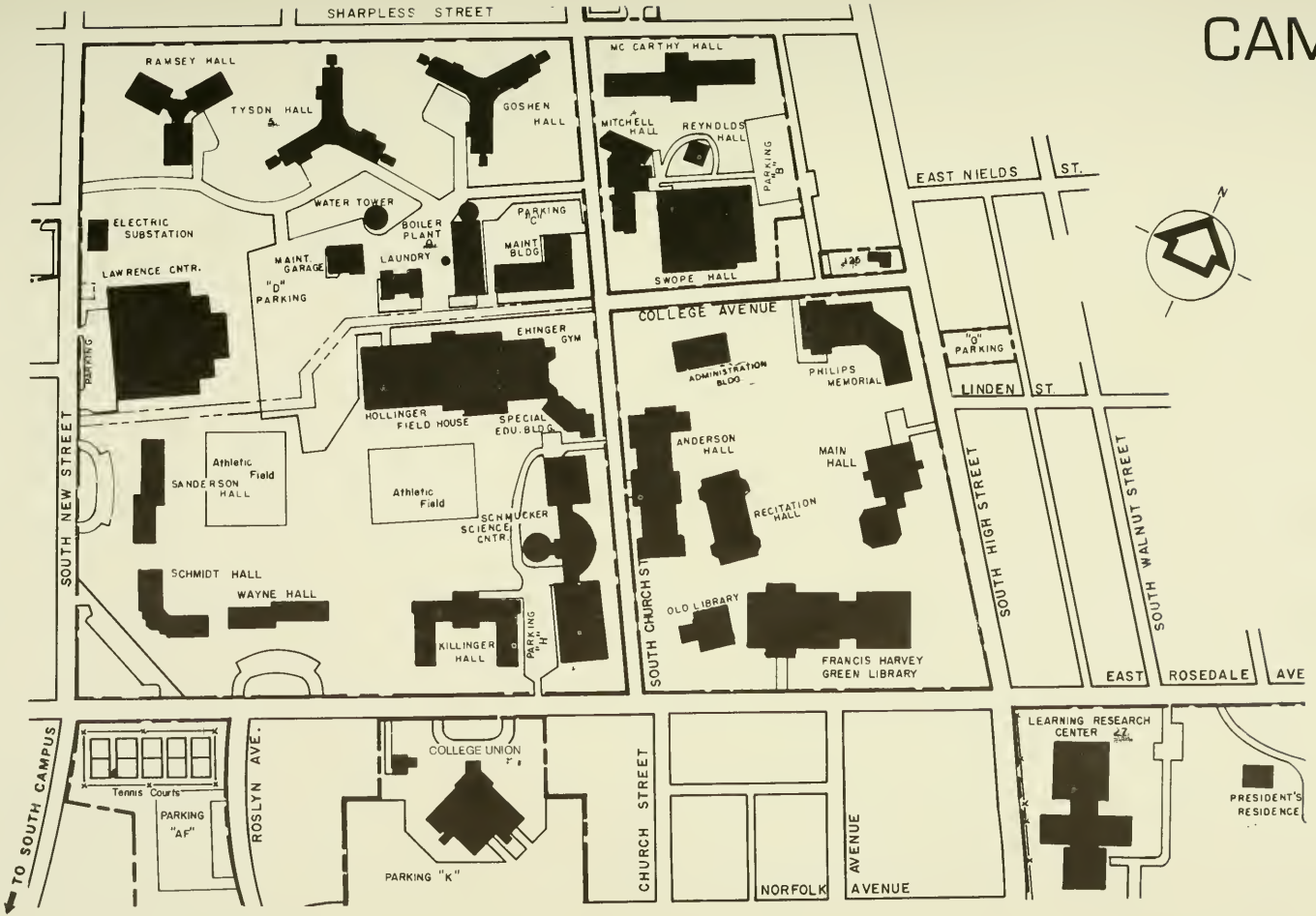
STAMP

Office of Graduate Studies
Administration Building
West Chester State College
West Chester, Pa. 19380

STAMP

Director of Admissions
Administration Building
West Chester State College
West Chester, Pa. 19380

CAMPUS MAP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TYSON HALL
GOSHEN HALL
MC CARTHY HALL
MITCHELL HALL
REYNOLDS HALL
PARKING "B"
EAST NIELDS ST.
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BOILER PLANT
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"D" PARKING
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COLLEGE AVENUE
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SPECIAL EDU. BLDG.
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THIRD CLASS

A Summer Place . . .

graduate studies
summer 1975
west chester state college bulletin

WEST CHESTER STATE COLLEGE BULLETIN

Volume 103/No. 2 March 1975

GRADUATE STUDIES

SUMMER 1975

West Chester, Pennsylvania 19380

ACCREDITATION

The Middle States Association of Colleges and Secondary Schools

The National Council for Accreditation of Teacher Education

The American Association for Health, Physical Education, and Recreation

The National Association of Schools of Music

The Council on Social Work Education

The American Chemical Society

West Chester State College is a member of The Council of Graduate Schools in the United States.

Willard J. Trezise, Dean of Graduate Studies

Office of Graduate Studies

Room 205 Administration Building

Telephones: (Area Code 215)
436-2243, 436-2943
436-2659, 436-2736

Issued six times a year, Jan., March, April, May, Sept., and Oct., by the Trustees of West Chester State College at West Chester, Pennsylvania. Entered as second class matter March 3, 1931, at the Post Office at West Chester, Pennsylvania, under the Act of Congress of August 24, 1912. Second Class Postage paid at West Chester, Pa. 19380.

GRADUATE PROGRAMS AT WEST CHESTER

Certification and/or Master of Education

- Biology
- Counselor Education*
- Elementary Education
- English
- French
- Geography
- German
- Health and Physical Education
- Instructional Media Education
- Latin
- Mathematics
- Reading
- Secondary Education
- Social Science
  - Concentrations in:
    - History
    - Political Science
    - Psychology
    - Sociology-Anthropology
- Spanish
- Special Education: Teaching the Emotionally Disturbed**

Master of Arts

- Biology
- English
- French
- Geography
- German
- History
- Latin
- Mathematics
- Music
- Philosophy
- Physical Science
- Psychology
- Social Science
  - Concentrations in:
    - History
    - Political Science
    - Psychology
    - Sociology-Anthropology
- Spanish
- Teaching English as a Second Language

Master of Science

- Chemistry
- Educational Research
- Health and Physical Education
- Instructional Media

Master of Music

- (Music Education)
- (Music Theory or Composition)
- (Applied Music)

*At West Chester State College, the master's degree is required for those seeking certification in Counselor Education.
**Certification only.

1975 Academic Calendar
Graduate Summer Sessions

PRE SESSION (Evening) — **Monday, June 2 through Friday, June 20**

Pre Session Registration:
Saturday, May 31

REGULAR SESSION (Day) — **Tuesday, June 24 through Friday, August 1**

Regular Session Registration:
Thursday, June 19

Holiday: Friday, July 4

POST SESSION (Day) — **Tuesday, August 5 through Friday, August 22**

Post Session Registration:
Monday, August 4

The date for 1975 Spring Commencement has been changed to Saturday, May 17. Time: 10:00 a.m. Place: John A. Farrell Stadium.

Cover drawing by Kathi Rinck, '75

The College reserves the right to change the Graduate Academic Calendar if deemed necessary.

The provisions of this Bulletin are not to be regarded as an irrevocable contract between the student and the College. West Chester State College reserves the right to change any provisions or requirements at any time within the student's term of attendance.

General Information

Detailed information about the graduate program at West Chester is given in the biennial Graduate Studies Bulletin, a copy of which may be obtained from the Graduate Office.

The following items cover only those general and academic matters which are considered particularly pertinent to the student attending Graduate Summer Sessions.

How to Reach West Chester

Route 3 (West Chester Pike) from Philadelphia.
Route 100 South from Downingtown Interchange of Pennsylvania Turnpike.
Route 202 South from Valley Forge Interchange of Pennsylvania Turnpike.
Septa Buses from 69th Street Terminal in Philadelphia.
Penn Central Railroad from Philadelphia to West Chester (limited schedule).

Route 100 South brings you into West Chester on High Street. Stay on High Street until you reach the College, almost one mile south of the center of town (Gay and High). Using Route 202, take the exit marked "West Chester Business District/High Street" and you will be headed toward the College, one mile north.

Housing

Graduate students may live in the College residence halls during Summer Sessions (though not in the fall and spring semesters). Apply to the office of the Associate Deans of Students one week before the opening of a Session. Rooms may be occupied after 2:00 p.m. on the Sunday preceding each Session. The College has no housing for married students.

Recreational Opportunities

For its Summer Sessions, the College offers a variety of cultural, recreational, and social activities, usually including trips to Robin Hood Dell concerts in Philadelphia, excursions to Longwood Gardens, a campus cinema series, tennis, bicycling, dances, swim-

ming, picnicking, and faculty-student coffee hours. Consult the Coordinator of Recreation Services (436-2133) for further information.

Placement and Career Services

The College maintains an active Career Development Center for its students. The Center is notified of many positions on all levels of instruction, as well as of openings in business and industry. Graduate students are encouraged to use the services and resources of the Center, located in Reynolds Hall.

Veterans' Allowances

Veterans intending to receive allowances must have their enrollment verified in the Veterans' Affairs Office, Administration Building, during the first week of each semester and at the beginning of the Summer Sessions.

Grading System

The grading system employed in the graduate program is as follows:

Grade	Interpretation	Percentage Equivalents	Quality Points
A	Excellent	A—90-100	4
B	Above average	B—80-89	3
C	Average	C—70-79	2
D	Below average	D—60-69	1
F	Failure	F—59 or lower	0
I	Incomplete		
WF	Withdrew Failing	F—59 or lower	0
WP	Withdrew Passing		
Aud	Audit		

Consult the Graduate Studies Bulletin for policies concerning grade requirements.

Residence Requirements

All graduate students planning to receive the master's degree from West Chester State College must take a minimum of two courses during one of the Regular Summer Sessions or enroll as a full-time graduate student during one of the College semesters.

The College will accept in transfer only courses taken in residence at other approved graduate schools.

Abbreviations and Policy Matters

Buildings are designated on schedules as follows:

A—Anderson
B—Learning Research
C—Schmucker
F—Mitchell
G—Old Library
H—Health/Physical Education Center
M—Main Hall
R—Recitation Hall
S—Swope Hall
S-Au—Swope Auditorium
S-Ch—Swope Choral Room
S-In—Swope Instrumental Room
SEB—Special Education Bldg.
W—Wayne

NEW indicates a course not described in the Graduate Studies Bulletin.

The number in parentheses, following a course title, shows semester hours of credit.

TBA means: to be arranged.

Faculty assignments are not shown in this Bulletin. Schools and departments will post faculty lists on their bulletin boards in advance of sessions.

Offerings listed are contingent upon sufficient enrollment.

Policy on Undergraduate Courses

Certain specified 400-level undergraduate courses have been approved for graduate credit, under the following provisions:

1. Written permission must be obtained from (a) the department chairman, (b) the Associate Dean for Graduate Studies or the School Dean in Schools with no Associate Dean, and (c) the Dean of Graduate Studies.
2. Graduate students may register for approved 400-level undergraduate courses at Graduate Registrations only.
3. No more than six semester hours of undergraduate course work may be applied toward a master's degree.
4. The above policies apply only to undergraduate courses taken at West Chester State College.

Fees for Summer Sessions

Fees are subject to change without notice.

Unless otherwise specified, fees are payable by check or money order drawn to: Commonwealth of Pennsylvania. (Your check or money order record is your receipt.)

Basic Fee

Graduate students who are legal residents of Pennsylvania—$42 per semester hour of credit. Graduate students living outside the State—$46 per semester hour of credit.

Housing Fee

The housing fee for resident students is $156 for the Regular Session and $78 for the Pre or Post Session. This fee covers room and meals. A private room is $2 additional per week.

Late Registration Fee

A fee of $10 is charged for late registration.

Car Registration Fee

A car registration fee is payable at Registration to the Intracollegiate Governmental Association. The fee is $1.00 and covers all three Sessions. (Those who register for Post Session pay only 50¢.)

Student Activities Fee

Graduate students pay the student activities fee of $4.00 for the Regular Session and $2.00 for the Pre or Post Session. (Check or money order drawn to Intracollegiate Governmental Association.)

Music Fees

In addition to the basic fee, graduate students in music are subject to the following schedule of fees:

Private Music Lesson Fee

Piano, Organ, Instrument, or Voice	$55 per session
Instrument Class or Ensemble	$35 per session

Rentals

Any Band or Orchestral Instrument $1 per week (Minimum charge $3.00)

Withdrawals and Refunds

No refund will be made after one-third of scheduled classes for a given Summer Session except in cases of personal illness, certified by the attending physician, or for an extreme family emergency as approved by the Board of Trustees.

Withdrawal forms must be completed and returned to the Graduate Office before the end of the Session from which the student withdrew.

Withdrawal forms are available in the Graduate Office. Forms must be completed by the student; signed by the professor, Department Chairman, and Dean or Associate Dean for Graduate Studies of the School.

Requests for refunds must be made in writing to the Office of Business Affairs.

If a student registers for a course but withdraws before attending any of its classes, he is eligible, upon application, to receive a refund of all but $10. Refunds will not be made to students who are suspended or dismissed or who drop courses without the approval of the Dean of Graduate Studies.

Registration Procedures
Summer 1975

If you are enrolled in our Graduate Program you will find your Permit/Registration cards and Business Office cards, for all three Sessions, inside this Bulletin. Bring with you the two cards for the particular Registration you are attending. Before you come, fill them out completely. (This speeds Registration.)

If you are an enrolled student but, for some reason, fail to receive these materials, contact the Graduate Office in advance of Registration for any Session you plan to attend.

If you are not enrolled in our graduate program but wish to be admitted, either to a degree program or for course work, contact the Graduate Office for an application form. When you submit this form you must also see that the institution which granted your baccalaureate degree sends two official transcripts to the Graduate Office. We will answer your application, by letter, as soon as possible.

For detailed information about admission, see the Graduate Studies Bulletin.

SUMMER 1975 REGISTRATION DAYS

PRE SESSION ONLY — Saturday, May 31
8:30-10:00 a.m. (A-L)
10:00-12:00 Noon (M-Z)
(No registration for Regular or Post Session at this time)

REGULAR SESSION ONLY — Thursday, June 19
8:30-11:30 a.m.
1:00-3:30 p.m.
(No registration for Post Session at this time)

POST SESSION ONLY — Monday, August 4
1:00-3:00 p.m.

Uniform Steps for Each Registration

Note Well: Fees for each Session (Pre, Regular, or Post) must be paid at its Registration. Payments by mail are not acceptable.

STEP I. REGISTRATION CENTERS

1. Go to your Center (see list below) with your Permit/ Registration Card and Business Office Card.
2. Have your department representative sign your Permit/ Registration Card.
3. Obtain your Course Card(s). Be certain you receive correct Card(s)—check course number, title, and section number for each course.

STEP II. LAWRENCE CENTER (DINING HALL)

1. Go to Business Office Table with your Business Office Card and pay your bill.
2. Go to Check-out Table and turn in (first) your Permit/ Registration Card and (second) your Course Card(s).

When you leave Lawrence Center you should have in your possession an invoice, validated by the Business Office. Note: this invoice must be presented at the first class meeting in order to gain admission.

Procedure for Drop/Add. Students who wish to drop or add a course must begin the procedure by coming directly to the Graduate Office. The periods for dropping or adding a course are:

Pre Session	Prior to second class period (6/3/75)
Regular Session	Prior to third class period (6/26/75)
Post Session	Prior to second class period (8/6/75)

1975 GRADUATES NOTE

If you expect to graduate in December 1975, your Letter of Intent to Graduate must reach the Graduate Office by October 1, 1975, and you must send a copy of this letter to your department by the same date.

Registration Centers

FIELD	BUILDING
Art	Mitchell—Room 212
Biology	Schmucker—Room 117
Chemistry	Schmucker—Room 131
Criminal Justice	Anderson—First Floor
Earth Sciences	Schmucker—Room 131
Education (Counselor)	Anderson—Room 2
Education (Elementary)	Anderson—Rooms 101, 103, 105, 107
Education (Instructional Media)	Anderson—Room 17
Education (Reading)	Recitation—Rooms 210, 211, 212
Education (Secondary Education and Professional Studies)	Anderson—Room 116
Education (Special)	Anderson—Room 117
Education (Urban)	Anderson—Room 117
Educational Research	Anderson—Room 109
English	Main—Fifth Floor
Foreign Languages	Main—First Floor
Geography	Anderson—Fourth Floor
Health and Physical Education	Health and Physical Education Center
History	Main—Room 131
Linguistics	Main—First Floor
Mathematical Sciences	Anderson—Third Floor (North)
Music	Swope—Room 11
Philosophy	Main—First Floor
Physical Science	Schmucker—Room 131
Physics	Schmucker—Room 131
Political Science	Anderson—Fourth Floor
Psychology	Anderson—Room 206
Sociology/Anthropology	Old Library—Room 201
Speech Communication and Theatre	Main—Fifth Floor
Speech Pathology and Audiology	Wayne—Second Floor

Pre Session

June 2-20, 1975

All classes begin 6 p.m.

Two-credit courses meet from 6:00 p.m. to 8:30 p.m. Three-credit courses meet from 6:00 p.m. to 9:30 p.m., Monday through Thursday each week.

Exceptions as noted.

REQUIRED COURSE ALL M.Ed. CURRICULA

EdF 510—Educational Foundations (See Secondary Education)

School of Arts and Letters

ART

Art 525—Sculpture Workshop (3) MORNING: 8:00-9:30 and 10:30-12:00 Mon. thru Fri.

Art 551—Art Education in the Elementary School (3) AFTERNOON: 4:30-8:00 Mon. thru Thurs.

Art 565—Crafts Workshop (3) AFTERNOON: 4:30-8:00 Mon. thru Thurs.

Art 595—Latin American Art (3) MORNING: 8:00-9:30 and 10:30-12:00 Mon. thru Fri.

ENGLISH

Eng 500—Methods and Materials of Research (3)

Lit 529—Victorian Poetry and Prose I (3)

FOREIGN LANGUAGES

Spa 534—Spanish Lyric Poetry (3)

PHILOSOPHY

Phi 512—Contemporary Ethical Theories (3)

SPEECH PATHOLOGY AND AUDIOLOGY

SpP 531—Therapy for the Hearing Impaired (3)

School of Education

COUNSELOR EDUCATION

EdF 500—Methods and Materials of Research in Education—see Secondary Education

EdC 503—Introduction to Guidance Services (2)

EdC 520—Analysis of Human Differences (3) NEW

EdC 540—Evaluative Methods in Guidance I (2)

EdC 556—Career Development Theories and Practices (2)

EdC 567—Group Dynamics (2)

EdC 575—Group Procedures in the Secondary School (2)

ELEMENTARY EDUCATION

EdE 504—Early Childhood Education Programs (3) NEW

EdE 532—Curriculum and Research in Social Studies (3)

EdE 543—Creative Expression in the Elementary School (3)

EdE 547—Elementary School Curriculum (2)

EdE 561—Guidance in the Elementary School (3)

EdE 565—Effective Classroom Management (3)

EdE 590—Independent Study (1-3) TBA

EdE 695—Seminar in Elementary Education (3) NEW

INSTRUCTIONAL MEDIA EDUCATION

EdF 500—Methods and Materials of Research in Education—see Secondary Education

EdM 502—Selection and Effective Utilization of Educational Media (3)

EdM 505—The Motion Picture in Education (3)

EdM 508—Instructional Materials in the Elementary School Curriculum (3)

EdM 519—Library Science (3)

EdM 590—Internship Program in Educational Media (2)

READING

EdF 500—Methods and Materials of Research in Education—see Secondary Education

EdR 511—Current Practices in Teaching Developmental Reading (3)

EdR 514—Reading in the Content Areas: Elementary (3)

EdR 521—Reading Clinic Practicum and Seminar I (3)
Section 01
Section 02

SECONDARY EDUCATION AND PROFESSIONAL STUDIES

EdF 500—Methods and Materials of Research in Education (2)

EdF 509—Contemporary Teaching Trends (2)

EdF 510—Educational Foundations (3)
Section 01 Section 03
Section 02 Section 04

EdF 590—School Law (3)

School of Health and Physical Education

HEALTH EDUCATION

HEd 542—Human Sexuality in a Changing Society (3) NEW

HEd 569—Addictive Diseases (3)

PHYSICAL EDUCATION

PEd 520—Scientific Principles of Coaching (3)

PEd 531—Adapted Physical Education (3)

PEd 536—Summer Dance Workshop/Effective Projection in Theater Dance (1) NEW June 2 thru June 20. Daytime technique classes under Lida Nelson Smith and guest teacher. Mon. thru Fri., beginning 10:30 a.m. Two evening performance classes weekly. TBA. For details communicate with Mrs. Lida Smith, School of Health and Physical Education

PEd 562—Administration and Supervisory Practices in H.P.E.R. and Athletics (3)

PEd 570—Curriculum in Health and Physical Education (3)

PEd 571—Comparative Physical Education (3)

PEd 583—Psychology in Safety Education and Accident Prevention (3)

PEd 749—Learning on the Move (Activities for Pre-Elementary School Children (3)* NEW

School of Music

Mus 527—Projects to Individualize Music Classes (3)

* Undergraduate course approved for graduate students See "Policy on Undergraduate Courses" in front.

School of Sciences and Mathematics

BIOLOGY

Bio 500—Methods and Materials in Biological Research (2) AFTERNOON: 4:30-7:00 Mon. thru Thurs.

Bio 550—Seminar in Organismic Biology: Insect Physiology (2)

CHEMISTRY

Che 508—Industrial Pollution (3) AFTERNOON: 4:30-8:00 Mon. thru Thurs.

Che 704—Foundations of Nutrition (3)* AFTERNOON: 4:30-8:00 Mon. thru Thurs.

EARTH SCIENCES

ESS 512—Historical Geology (3)

ScE 520—New Trends in the Elementary School Science Curriculum (3)

MATHEMATICAL SCIENCES

Mat 508—Topics in Mathematics Education (3)

Mat 556—Development of Mathematics Curricula in the Elementary Grades (3)

NURSING

Nsg 513—Nursing the Dying Patient (3) NEW. AFTERNOON: 4:30-8:00 Mon. thru Thurs.

School of Social and Behavioral Sciences

GEOGRAPHY

Geo 546—Geography of the Soviet Union (3)

HISTORY

His 509—Revolutionary America: 1763-1789 (3)

His 525—Studies in the History and Culture of East Asia (3)

His 533—Dynastic Europe: 1648-1789 (3)

PSYCHOLOGY

Psy 505—Advanced General Psychology (3) 5:00-8:30 p.m. Mon. thru Thurs.

Psy 508—Advanced Adolescent Psychology (3) 5:00-8:30 p.m. Mon. thru Thurs.

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* Undergraduate course approved for graduate students. See "Policy on Undergraduate Courses" in front.

Psy 550—Seminar in Psychology (3) MORNING: 8:00-9:30, 10:30-12:00 Noon Mon. thru Fri.

Psy 559—Advanced Principles of Psychotherapy (3) 5:00-8:30 p.m. Mon. thru Thurs.

SOCIOLOGY

Soc 533—American Minorities (3)

Regular Session

June 23-August 1, 1975

Classes meet Tuesday, June 24, through Friday the first week, and Monday through Friday thereafter.

Two-credit courses meet one hour daily and three-credit courses meet 1 1/2 hours daily.

Exceptions as noted.

Holiday: Friday, July 4

REQUIRED COURSE ALL M.Ed. CURRICULA

EdF 510—Educational Foundations (See Secondary Education)

School of Arts and Letters

ART

8:00

Art 546—Drawing (3) Sec 01 of two sections

9:30

Art 520—Painting Workshop (3) Sec 01 of two sections

Art 531—Ceramics I (3)

Art 534—Ceramics Workshop (3)

Art 596—Introduction to Aesthetics (3)

11:00

Art 525—Sculpture Workshop (3)

4:00-6:00

Art 549—Graphic Design Workshop (3) Mon. thru Thurs.

6:00-8:00 p.m.

Art 520—Painting Workshop (3) Section 02 Mon. thru Thurs.

Art 541, 542, 543, 544—Printmaking Workshop (3) (Each course 3 credits; select appropriate level) Mon. thru Thurs.

Art 546—Drawing (3) Section 02 Mon. thru Thurs.

Art 565—Crafts Workshop (3) Mon. thru Thurs.

ENGLISH

8:00

Eng 501—Modern Techniques for the Teaching of English (3)

Lit 511—History of Criticism I (3)

Lit 536—20th-Century Drama (3)

9:30

Lit 547—Jacobean and Caroline Drama (3)

Lit 550—Literature for the Elementary School (3)

Lit 634—Seminar: Twain and James (3)

11:00

Eng 715—Structure of Modern English (3)*

Lit 525—Biography (3)

Lit 544—Shakespeare's Tragedies and Histories (3)

Lit 632—Seminar: Hemingway and Faulkner (3)

TBA

Eng or Lit 590—Independent Study (3)

FOREIGN LANGUAGES

8:00

Spa 711—Seminar in Puerto Rican Culture (3)*

9:30

Lan 504—Use of Media in Language Teaching (3)

Spa 542—Spanish Romanticism (3)

11:00

Fre 530—French Classical Tragedy (3)

Spa 530—Spanish Comedia of the Golden Age (3)

TBA

Ger 590—Independent Study in German (3)

Summer Seminars in Foreign Language Education

Four seminars in new theories and techniques in foreign language education will be offered during the 1975 Summer Sessions. Two will be given in Regular Session and two in Post Session. For application communicate with Mr. Ronald L. Gougher, Director of Summer Workshops, Department of Foreign Languages.

Lan 580—Seminar in Second Language Education: In-

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* Undergraduate course approved for graduate students See "Policy on Undergraduate Courses" in front.

dividualizing Foreign Language Instruction (3) (Sec 01 of 4 sections) July 8-18; 9:00-5:30

Lan 580—Seminar is Second Language Education: Workshop in Communication (2) (Section 02) July 14-18; 9:00-5:30

SPEECH PATHOLOGY AND AUDIOLOGY

8:00

SpP 513—Stuttering (3)

9:30

SpP 500—Survey of Speech Disorders (3)

TBA

SpP 560—Graduate Clinic Practicum in Speech Pathology (1)

School of Education

COUNSELOR EDUCATION

EdF 500—Methods and Materials of Research in Education—see Secondary Education

8:00

EdC 540—Evaluative Methods in Guidance I (2)

EdC 541—Evaluative Methods in Guidance II (2)

EdC 567—Group Dynamics (2)

9:30

EdC 567—Group Dynamics (2)

EdC 571—Theories of Counseling (2)

EdC 585—Contemporary Issues and Trends in Guidance (2)

11:00

EdC 503—Introduction to Guidance Services (2)

EdC 590—Practicum in Guidance and Counseling (Elementary School) (3)

EdC 591—Practicum in Guidance and Counseling (Secondary School) (3)

ELEMENTARY EDUCATION

EdE 590—Independent Study (1-3) TBA

8:00

EdF 501—Methods and Materials of Research and Study for Elementary Education Majors—see Secondary Education

EdE 544—Theory and Historical Background of Open Education in Elementary Schools (3) NEW

EdE 547—Elementary School Curriculum (2)

EdE 548—Curriculum Theory and Trends in Elementary Education (3) NEW

EdE 551—Child Development and Behavior I (3)

9:30

EdE 553—Child Development and Behavior II (3) Sec 01 of two sections

EdE 581—Workshop in Open Education (Elementary) (3)
Section 01 Section 03
Section 02 Section 04

11:00

EdE 530—Social Studies in Elementary Education (3)

EdE 543—Creative Expression in the Elementary School (3)

EdE 549—Theory and Trends in the Language Arts (3) NEW

EdE 553—Child Development and Behavior II (3) Section 02

ENVIRONMENTAL EDUCATION

11:00

EdO 515—History of Conservation (3) NEW

INSTRUCTIONAL MEDIA EDUCATION

EdF 500—Methods and Materials of Research in Education—see Secondary Education

8:00

EdM 520—Designing Instructional Materials (3)

EdM 555—Learning Theories Related to Educational Media (3)

9:30

EdM 502—Selection and Effective Utilization of Educational Media (3)

EdM 522—Production of Non-Projected and Projected Materials (3)

EdM 560—Organization and Administration of the Educational Media Program (3)

11:00

EdM 519—Library Science (3)

EdM 525—Photography for Teachers (3)

EdM 529—Instructional Use of the 8 mm. Motion Picture Camera (3)

READING

EdF 500—Methods and Materials of Research in Education—see Secondary Education

8:00

EdR 516—Reading Disabilities (3)

9:30

EdR 510—Foundations of Reading Instruction: K-12 (3)

EdR 522—Reading Clinic Practicum and Seminar II (3) Sec 01 of two sections

EdR 526—Reading Readiness and Early Childhood Experiences (3) NEW

EdR 541—Organization and Operation of Reading Programs: K-12 (3)

11:00

EdR 511—Current Practices in Teaching Developmental Reading (3)

EdR 522—Reading Clinic Practicum and Seminar II (3) Section 02

EdR 525—Reading for the Disadvantaged (3)

SECONDARY EDUCATION AND PROFESSIONAL STUDIES

8:00

EdF 500—Methods and Materials of Research in Education (2) Sec 01 of three sections

EdF 501—Methods and Materials of Research and Study for Elementary Education Majors (3)
Section 01
Section 02

EdF 505—Individually Prescribed Instruction (3)

EdF 510—Educational Foundations (3)
Section 01 of six sections
Section 02

EdF 523—Education Behind the Iron Curtain (3)

EdP 550—Advanced Educational Psychology (3) Sec 01 of two sections

9:00

EdF 504—Middle School Workshop (4) Given two times in Regular Session. At registration choose either of these three-week periods:
June 24—July 11 (9:00—12:00 Noon)
July 14—Aug. 1 (9:00—12:00 Noon)

9:30

EdF 500—Methods and Materials of Research in Education (2) Section 02

EdF 510—Educational Foundations (3)
Section 03
Section 04

EdF 521—Contemporary British Education (3)

EdP 560—Behavior Modification (3)

EdP 569—Adolescent Development and Learning (3)

11:00

EdF 510—Educational Foundations (3) Section 05

EdF 580—History of American Education (3)

EdP 550—Advanced Educational Psychology (3) Section 02

EdS 524—Supervision of Student Teaching (3)

6:00-8:30 p.m.

EdF 500—Methods and Materials of Research in Education (2) (Mon. and Wed.) Section 03

6:00-9:30 p.m.

EdF 510—Educational Foundations (3) (Tues. and Thurs.) Section 06

SPECIAL EDUCATION

8:00

EdA 540—Workshop in Special Education (4) (8:00-12:00 Noon) Permission of Dr. Howard Freeman, Special Education Coordinator, required

URBAN EDUCATION

9:30

EdU 501—Curricular Adaptations for the Disadvantaged (3)

CRIMINAL JUSTICE

6:00-9:30 p.m.

CrJ 520—Notable Criminal Cases (3) NEW Mon. and Wed.

School of Health and Physical Education

HEALTH EDUCATION

8:00

HEd 544—Principles of Curriculum and Instruction for Health Education (3) NEW

9:30

HEd 540—School Health Problems (3)

11:00

HEd 565—Scientific Bases for Health (3)

PHYSICAL EDUCATION

8:00

PEd 500—Methods and Materials of Research in Health and Physical Education (2)

PEd 534—Modern Principles of Athletic Training (3)

PEd 551—Seminar in Professional Literature in Health, Physical Education, and Recreation (3)

PEd 561—Techniques of Measurement and Evaluation in Health and Physical Education (3)

PEd 572—The Child and Physical Education (3)

9:30

PEd 502—Elementary Physical Education Workshop (2)

PEd 521—Sports Psychology (3) NEW

PEd 530—Scientific Bases for Physical Education (3)

PEd 573—The Olympic Games—Their Influences on the Ancient and Contemporary Worlds (2)

PEd 591—Research Project Seminar I (2)

PEd 592—Research Project Seminar II (1)

PEd 593—Thesis Seminar (2)

11:00

PEd 504—Elementary Physical Education and Recreation Music Workshop (2) NEW

PEd 535—History of Dance (3) NEW

PEd 550—Historical and Philosophical Bases for Health and Physical Education (3)

PEd 566—Mechanical Analysis of Motor Skills (3)

1:30

PEd 512—Outdoor Education Workshop (2)

6:00-9:00 p.m.

PEd 587—Seminar in the Four-Phase Program of Driver Education (3) THREE WEEK SESSION: June 23-July 11 Mon. thru Fri.

PEd 584—Seminar in Motorcycle Safety Education (3) THREE WEEK SESSION: July 14-Aug. 1 Mon. thru Fri. (Students must register in the prescribed manner for Regular Session)

(For further information regarding PEd 587 and 584 communicate with Mr. John Bove, Acting Coordinator for Safety Education, School of Health and Physical Education)

TBA

PEd 600—Independent Study and Special Projects (1-3)

PEd 610—Thesis (4)

School of Music

8:00

Mus 502—Aspects of Musical Style II (3)

Mus 528—Accompanying (3)

Mus 529—Instrument Repairs (3) NEW

Mus 530—Vocal Diction II (3)

Mus 552—Marching Band Techniques and Materials (3)

Mus 662—Serialism and Atonality (3) NEW

9:30

Mus 500—Methods and Materials of Research (3)

Mus 510—Current Trends in Music Education (3)

SEn 523—String Ensemble (2)

WEn 523—Woodwind Ensemble (2)

MaB 536—Master Class in Brasses (2)

Mus 559—Choral Literature (3)

Mus 574—History of the Symphony (3)

11:00

Mus 501—Aspects of Musical Style I (3)

Mus 503—Philosophical Foundations of Music Education (3) NEW

WwC 525—Class Lessons in Woodwinds (2)

ICo 533-34—Advanced Instrumental Conducting (2)

Mus 561—Brass Literature (3)

Mus 583—Contemporary Music (3)

Mus 661—Jazz Practices (3) NEW

12:30

Mus 524—Intermediate Orff (3)

Mus 526—Intermediate Kodaly (3)

Mus 557—Piano Literature il (3)

SyO 519-22—Symphony Orchestra (1)

1:00

BEn 523—Brass Ensemble (2)

CCo 533-34—Advanced Choral Conducting (2)

Mus 562—String Literature (3)

2:00

Cho 519-22—Chorus (1)

3:00

CMB 519-22—Band (1)

Mus 531-32—Opera Workshop (3)

By appointment
Private instruction in piano, voice, and instruments. (Contact School of Music for details)
Mus 565—Introduction to Research in Music History (2)
Mus 598-99—Research Seminar in Music (2-1)
Mus 600—Research Report (1)
Mus 604-05—Recital (1-2)
Mus 610—Thesis (3)

School of Sciences and Mathematics

BIOLOGY

Mini-Courses in Biology

These courses take place alongside streams and in woodlands of Chester County. Each course meets Mon. thru Fri., 9:00-12:00 Noon and 1:00-3:00. REGISTRATION ON JUNE 23 REQUIRED. Students may take one, two, or all of the courses, as desired. For more information communicate with Dr. William R. Overlease, Department of Biology.

July 14 thru July 18:
Bio 517—How to Identify Common Summer Birds of Southeastern Pa. (1)

July 21 thru July 25:
Bio 516—How to Identify Common Summer Flowers of Southeastern Pa. (1)

July 28 thru Aug. 1:
Bio 515—How to Identify Common Trees of Southeastern Pa. (1)

8:00

Bio 590—Seminar in Biological Principles (2)

9:30

Bio 578—Freshwater Invertebrates (3)

11:00

Bio 503—Mammalian Physiology (3)

CHEMISTRY

(Labs are listed separately)

8:00

Che 530—Organic Chemistry for Teachers (3) (For those who have never had organic chemistry) May be taken without Lab

Che 536—Polymer Chemistry (3)

Che 541—Physical Chemistry for Teachers (3) (For those who have never had physical chemistry) May be taken without Lab

9:30

Che 503—Chemistry of the Environment (3) NEW (Not for M.S. in Chemistry) Visits to industries may be scheduled certain mornings

Che 513—Principles of Geochemistry (3) (also ESS 513)

Che 580—Workshop for Secondary School Chemistry Teachers (3) (ILS Chemistry, a multi-media approach)

12:00

Che 506—Scientific Research and the Common Man (3) NEW (Not for M.S. in Chemistry)

Chemistry Labs

10:00-2:00

ChL 530—Basic Experimental Organic Chemistry (2) NEW (Lab for Che 530) Mon. and Fri.

11:30-3:30

ChL 541—Basic Experimental Physical Chemistry (2) NEW (Lab for Che 541) Tues. and Thurs.

EARTH SCIENCES

8:00

ESS 540—Introduction to Meteorology (3)

ScE 595—Elementary School Science Instruction (3)

9:30

ESS 513—Principles of Geochemistry (3) (also Che 513)

ESS 550—General Astronomy (3)

ScE 500—Modern Trends in Secondary School Education (3)

11:00

ESS 501—Earth Sciences in the Secondary School (3)

ESS 521—Workshop in Rocks and Minerals (3)

MATHEMATICAL SCIENCES

8:00

Mat 501—Fundamental Concepts of Mathematics I (3)

Mat 507—Current Trends in Teaching Mathematics (3)

Mat 555—Modern Techniques of Teaching Elementary School Mathematics (3)

Mat 565—Complex Analysis I (3)

9:30

Mat 514—Theory of Numbers (3)

Mat 530—Geometry for the Elementary Teacher (3)

Mat 541—Advanced Calculus (3)

Mat 563—Use of the Mathematics Laboratory in the Secondary School (3)* NEW

Mat 567—Teaching Geometry in the Secondary School (3)* NEW

11:00

CSc 501—Introduction to Computer Programming (3)

Mat 512—Modern Algebra (3)

Mat 521—Statistics I (3)

Mat 535—Topology (3)

Mat 560—Teaching Algebra in the Secondary School (3)* NEW

PHYSICS

11:00

PhS 513—Modern Physics for Teachers (3)

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* Designed primarily for teachers. Students should consult their adviser about applicability to degree programs.

SSc 580—Ethnic Cultures Institute (3) June 23-July 11 1:00-4:30

Jointly sponsored by the Schools of Arts and Letters and Social and Behavioral Sciences, the Institute will consider the contributions of ethnic groups to the culture of the United States. Designed primarily for teachers, community action personnel, and students who wish to increase knowledge and skills for developing meaningful intergroup relationships and improving classroom instruction. Educators and community leaders with extensive personal experience will participate. For details, communicate with Dr. Jody M. Harris, Director of Curriculum Enrichment.

GEOGRAPHY

9:30

Geo 584—Modern Techniques of Teaching Geography (3)

11:00

Geo 502—Regional Geomorphology of North America (3)

HISTORY

8:00

His 518—American Labor Since 1865 (3) NEW

9:00-12:00

His 510—Workshop in Bicentennial Activities (6)

Designed to develop an activities-based program for use in secondary social-studies classrooms. Primary sources; contemporary sources; instructional media; and local, state, and national sites related to the Revolutionary Era will be utilized. Culminating activities will be required field trips to selected Bicentennial centers. For further information contact Mr. Harold E. Shaffer, Director of the Bicentennial Workshop, Department of History.

9:30

His 500—Methods and Materials of Research in History (3)

His 550 or 551—Seminar: Women in History (3)

11:00

His 531—The Renaissance (3)

POLITICAL SCIENCE

9:30

PSc 551—Politics of the Non-Western Areas (3)

11:00

PSc 510—Grass Roots Politics and the American Voter (3) NEW 11:00-1:30 Mon., Wed., and Fri.

PSYCHOLOGY

8:00

Psy 529—Advanced Mental Hygiene (3)

9:30

Psy 501—Introductory Statistics for the Behavioral Sciences (3)

11:00

Psy 549—Introduction to Projective Techniques and Personality Testing (3)

6:00-9:30 p.m.

Psy 506—Theories of Learning (3) Tues. and Thurs.

Psy 509—Advanced Social Psychology (3) Tues. and Thurs.

Psy 517—Introduction to Psychopathology (3) Mon. and Wed.

Psy 527—Behavior Modification (3) NEW Mon. and Wed.

Post Session

August 4-22, 1975

Classes meet Tuesday, August 5, through Friday the first week and Monday through Friday thereafter.

Two-credit courses meet from 9:00 to 11:00 a.m. Three-credit courses meet from 8:00-9:30 a.m. and from 10:30-12 Noon.

Exceptions as noted.

REQUIRED COURSE ALL M.Ed. CURRICULA

EdF 510—Educational Foundations (See Secondary Education)

School of Arts and Letters

ART

Art 534—Ceramics (Raku) Workshop (3) EVENING: 6:00-9:30 Mon. thru Thurs.

ENGLISH

Lit 519—Major 20th-Century Irish Writers (3)

FOREIGN LANGUAGES

Summer Seminars in Foreign Language Education
(The preceding two seminars are described under Regular Session.)

Lan 580—Seminar in Second Language Education: Curriculum for Individualizing Instruction (2) (Section 03) Aug. 4-8; 9:00-5:30

Lan 580—Seminar in Second Language Education: Innovation and Implementation for Individualizing Instruction (2) (Section 04) Aug. 4-8; 9:00-5:30

SPEECH PATHOLOGY AND AUDIOLOGY

SpP 515—Orofacial Anomalies (3)

School of Education

COUNSELOR EDUCATION

EdF 500—Methods and Materials of Research in Education—see Secondary Education

EdC 530—The College Student (3) NEW

EdC 567—Group Dynamics (2)

EdC 569—The Professional Counselor in the Secondary School (2)

EdC 573—Counseling and Consultative Techniques in the Secondary School (2)

ELEMENTARY EDUCATION

EdE 522—Teaching the Communication Skills (3)

EdE 580—Workshop in Elementary Education (3)
Section 01
Section 02

EdE 583—Workshop in Creativity (3)

EdE 590—Independent Study (1-3) TBA

ENVIRONMENTAL EDUCATION

EdO 511—Environmental (Outdoor) Education Workshop (3) For details communicate with Mr. John Holingjak, Environmental Education Coordinator

INSTRUCTIONAL MEDIA EDUCATION

EdF 500—Methods and Materials of Research in Education—see Secondary Education

EdM 522—Production of Non-Projected and Projected Materials (3)

EdM 533—Television in Education (3)

EdM 563—Field Study in Educational Media (3)

READING

EdF 500—Methods and Materials of Research in Education—see Secondary Education

EdR 510—Foundations of Reading Instruction: K-12 (3)

SECONDARY EDUCATION AND PROFESSIONAL STUDIES

EdF 500—Methods and Materials of Research in Education (2)
Section 01
Section 02

EdF 503—The Emerging Curriculum (3)

EdF 510—Educational Foundations (3)
Section 01
Section 02

EdS 506—The Junior High School (2)

SPECIAL EDUCATION

EdA 571—Childhood Learning Disabilities (3) Permission of Dr. Howard Freeman, Special Education Coordinator, required

School of Health and Physical Education

HEALTH EDUCATION

HEd 567—Sociological Bases for Health (3)

PHYSICAL EDUCATION

PEd 510—School and Community Recreation (3)

PEd 582—Problems in Traffic and Driver Education (3) EVENING: 6:00

School of Music

Mus 714—Acoustics of Music (3)*

ICo 533-34—Advanced Instrumental Conducting (2)

School of Sciences and Mathematics

BIOLOGY

Bio 588—Medical Entomology (3) 8:00-12:00 Noon including Lab

EARTH SCIENCES

ESS 523—General Geologic Field Studies of Southeastern Pennsylvania (3)

ESS 571—Astronomy in the Elementary School (3)

MATHEMATICAL SCIENCES

CSc 550—Computers in Education (3)

Mat 502—Fundamental Concepts of Mathematics II (3)

Mat 510—Algebra for the Elementary Teacher (3)

Mat 552—Materials for Teaching Secondary School Mathematics (3)

School of Social and Behavioral Sciences

GEOGRAPHY

Geo 540—Geography of the United States (3)

Geo 571—Conservation Workshop for Teachers (3) (For details on program and scholarships, communicate with Mr. Charles Grassel, Chairman, Department of Geography and Planning, as early as possible)

* Undergraduate course approved for graduate students See "Policy on Undergraduate Courses" in front.

Geo 594—Area Field Study (Jamaica) (3) (For details and reservations, communicate with Dr. George Langdon, Department of Geography and Planning, as early as possible)

HISTORY

His 519—The Indian in America's Past (3) NEW

POLITICAL SCIENCE

PSc 534—American Political Parties (3)

PSYCHOLOGY

Psy 512—Psychology of Personality (3) EVENING: 5:00-8:30 Mon. thru Thurs.

Psy 544—Individual Psychometric Techniques: Wechsler and Binet Scales (3) EVENING: 5:00-8:30 Mon. thru Thurs.

Psy 550—Seminar in Psychology (Transactional Analysis) (2)

West Chester State College
West Chester, Pennsylvania 19380

GRADUATE STUDIES
SUMMER SESSIONS 1975

Entered as second-class matter
March 3, 1931, at the Post Office
at West Chester, Pennsylvania.